

# U.S. Department of Health & Human Services

# **Food and Drug Administration**

# SAVE REQUEST

USER: (kml)

**FOLDER:** K151204 - 379 pages

COMPANY: CORELEADER BIOTECH CO., LTD. (COREBIOT)

PRODUCT: DRESSING, WOUND, DRUG (FRO)

SUMMARY: Product: HEMO-BANDAGE

DATE REQUESTED: May 12, 2016

**DATE PRINTED:** May 12, 2016

Note: Printed



康力得生技股份有限公司 CoreLeader Biotech CO., LTD 22102 新北市汐止區新台五路一段100號19樓 FDA CDRH DMC

Received

JUN 1 0 2015

Food and Drug Administration

Date: 6<sup>th</sup> June 2015

Center for Devices and Radiological Health

Document Mail Center WO66-G609

10903 New Hampshire Avenue, Silver Spring, Maryland 20993-0002

Traditional 510(k): New Device Submission

Device Name:

CoreLeader HEMO-Bandage

Common Name:

Topical wound dressing

K Number:

unknown

Class

Unclassified

Panel

General & Plastic Surgery

510(k) Submitter:

CoreLeader Biotech Co., Ltd.

19F, No. 100, Sec. 1, Xintai 5th Rd., Xizhi Dist.,

New Taipei City, Taiwan, R.O.C. 22102

Phone: +886-2-26968880

Fax: +886-2-26968882

Contact Person:

Ya-Wen Kuo

Director, Regulatory and R&D

19F, No. 100, Sec. 1, Xintai 5th Rd., Xizhi Dist.,

New Taipei City, Taiwan, R.O.C. 22102

Phone: +886-2-26968880

FAX: +886-2-26968882

E-mail: ywk@coreleaderbio.com

eCopy Statement:

The eCopy is an exact duplicate of the paper copy.

### 康力得生技股份有限公司 CoreLeader Biotech CO., LTD 22102 新北市汐止區新台五路一段100號19樓

Dear Dr. Arepalli,

FDA CDRH DMC

JUN 1 0 2015

Warm greeting from Coreleader Biotech Co., Ltd.

Received

First of all, we appreciates your effort on reviewing our case very much. To further demonstrate the efficacy and safety of HEMO-Bandage, we hereby submits our new animal study which employs the *in vivo* hemorrhage model b(4)

This study contains more detailed hematologic parameters, tissue histology and b(4) compared to the previous one. We believe this study will further prove HEMO-Bandage is of the similar safety and efficacy as the predicate device, i.e. Combat Gauze. Please kindly take this study into your reviewing.

If there are any questions, please feel free to contact me at the aforementioned contact information.

Sincerely,

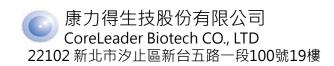
Ya-Wen Kuo

Va-Wer Kno

Director, Regulatory and R&D

CoreLeader Biotech Co., Ltd

B



Date: 6<sup>th</sup> June 2015

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Phone: +886-2-26968880

Fax: +886-2-26968882

Contact Person: Ya-Wen Kuo

Director, Regulatory and R&D

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Sincerely,

Ya-Wen Kuo

Director, Regulatory and R&D

CoreLeader Biotech Co., Ltd

# Chapter 6 Truthful and Accurate Statement

#### **Truthful and Accurate Statement**

I certify that, in my capacity as Director of Regulatory and R&D of CoreLeader Biotech Co., Ltd, I believe, to the best of my knowledge, that all data and information submitted in the premarket notification are truthful and accurate and that no material fact has been omitted.

Ya-Wen Kuo

Manager, Regulatory Affair CoreLeader Biotech Co., Ltd

Ya-Wen Kuo

Typed Name

2015/06/04

Date

\*(Premarket Notification [510(k)] Number)

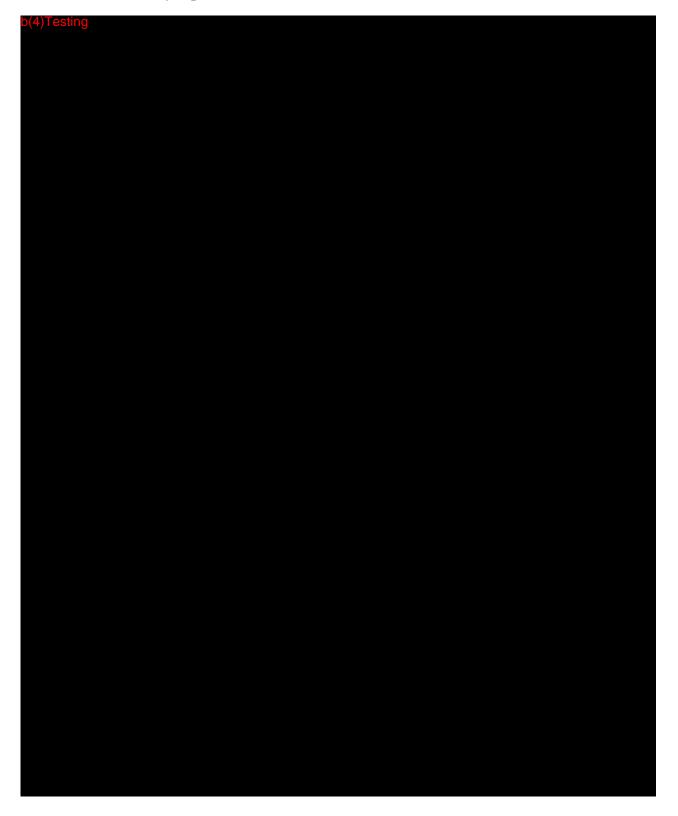
\*For a new submission, leave the 510(k) number blank.

Must be signed by a responsible person of the firm required to submit the premarket notification [e.g., not a consultant for the 510(k) submitter].

# Chapter 19

Performance Testing - Animal

1. The full study report is listed in Annex 1.



# **Study Report**

In vivo Hemostasis Performance of CoreLeader HEMO-bandage using Swine Model

# In vivo Hemostasis Performance of CoreLeader HEMO-bandage Using Swine Model

This study complied with the regulations of Ministry of Health and Welfare (MOHW), Taiwan, Organization for Economic Cooperation and Development (OECD), U.S. 21 CFR part 58.120 and 21 CFR part 58.185 on principles of Good Laboratory Practice for nonclinical laboratory studies. The study was conducted in accordance with an agreed protocol, and the results were truly recorded as they were. The characteristics and properties of the tested articles were provided by the sponsor—CoreLeader Biotech Co., Ltd.

(b) (6)

Study Director

Ya-Wen Kuo, PhD

Director, Regulatory and R&D

>0/x/86/84

Date: June 4th, 2015

2015/06/04

Date: June 4th, 2015

### **Quality Assurance Statement**

In compliance with regulations of Ministry of Health and Welfare (MOHW), Taiwan, Organization for Economic Cooperation and Development (OECD), U.S. 21 CFR part 58.120 and 21 CFR part 58.185, Department of Quality Control of CoreLeader Biotech inspected operator, facilities, equipment, test methods, raw data, and records of the study regularly. All original records, raw data, and documentations were truthfully addressed in the report.

Ya-Wen Kuo, PhD

Director, Regulatory and R&D

2015/06/04

Date: June 4<sup>th</sup>, 2015

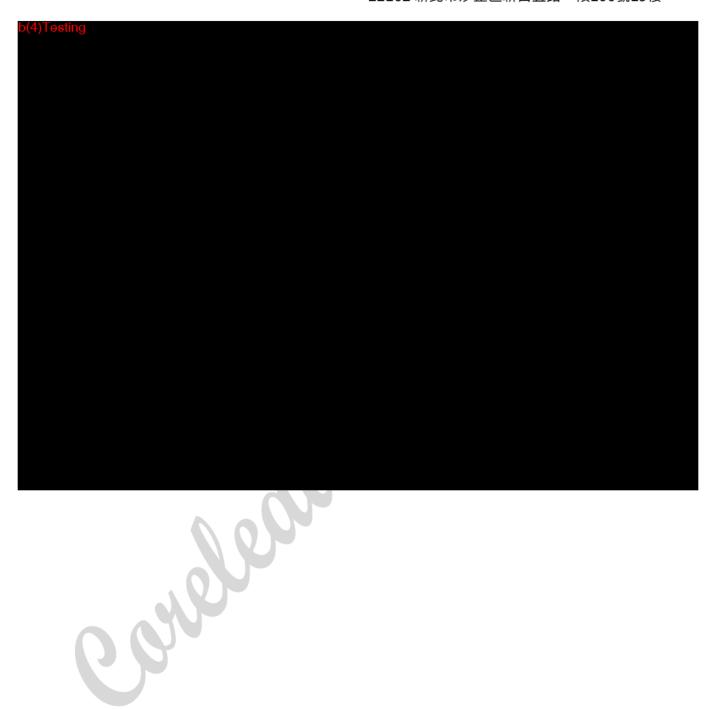
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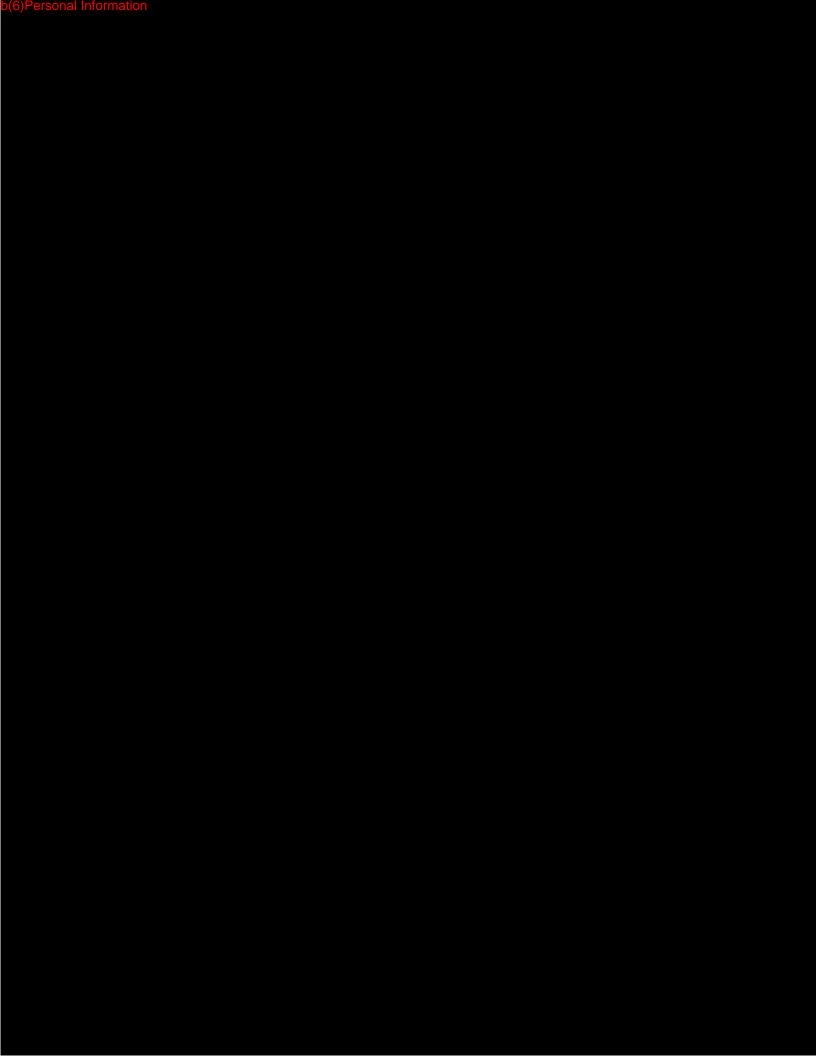
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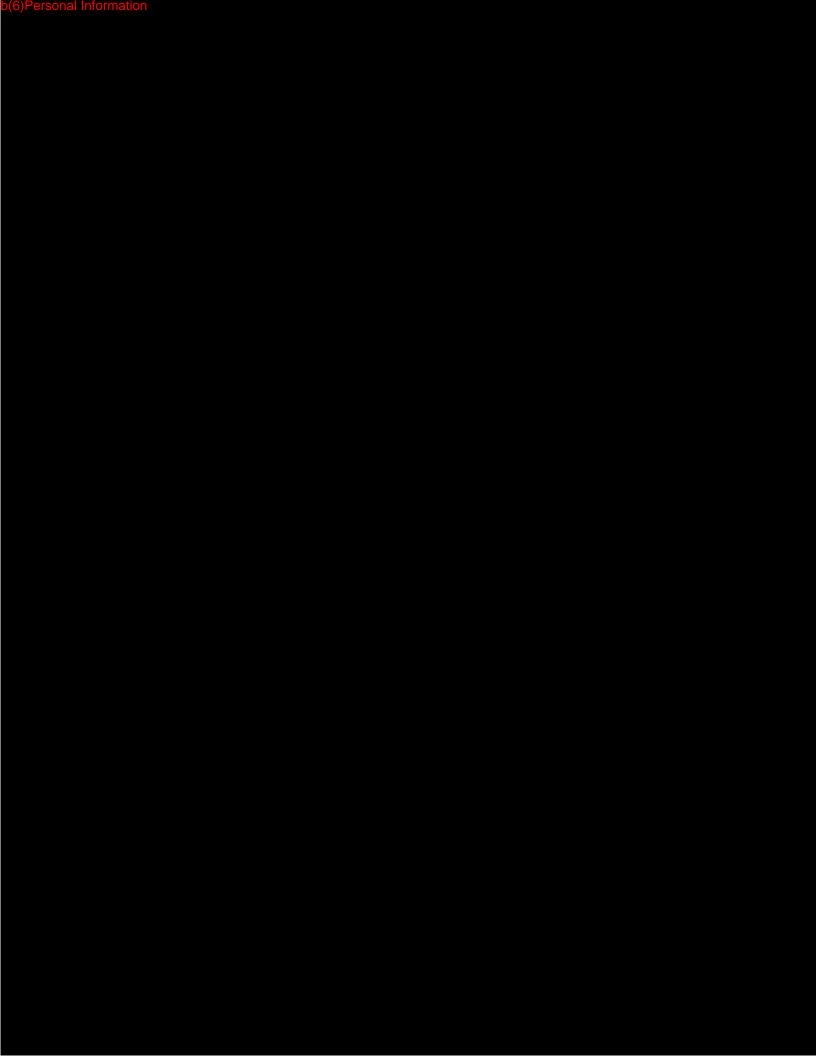
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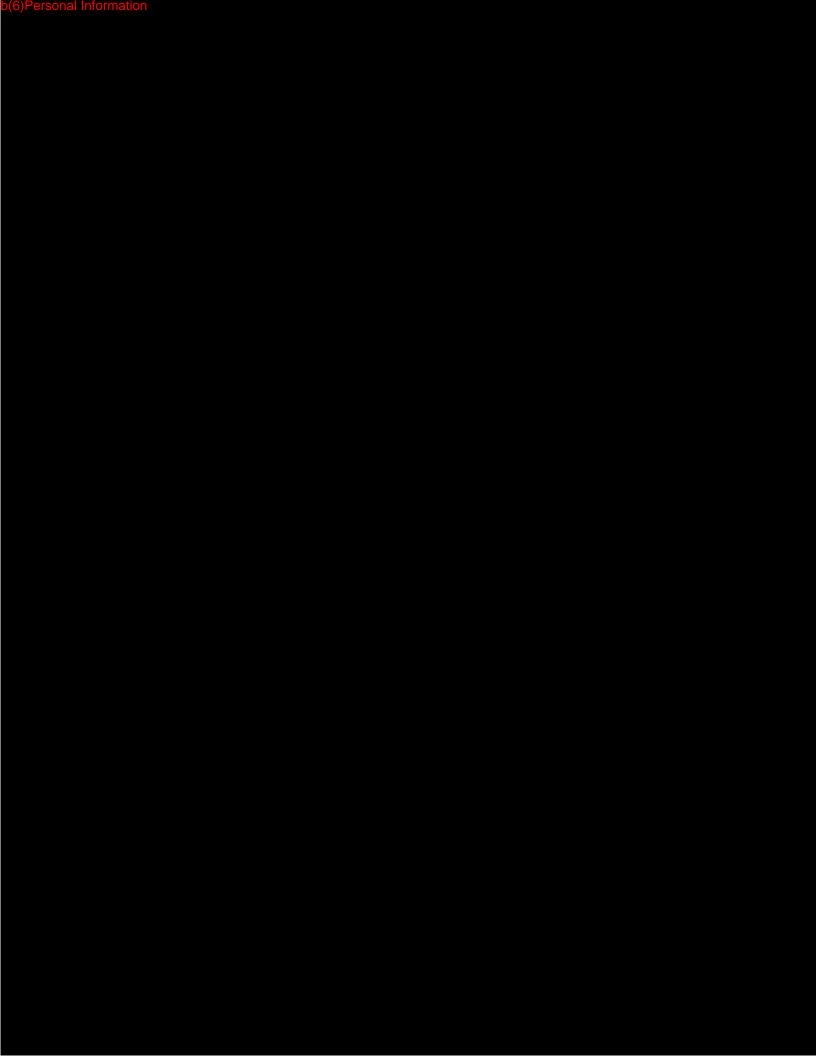
康力得生技股份有限公司 CoreLeader Biotech CO., LTD 22102 新北市汐止區新台五路一段100號19樓

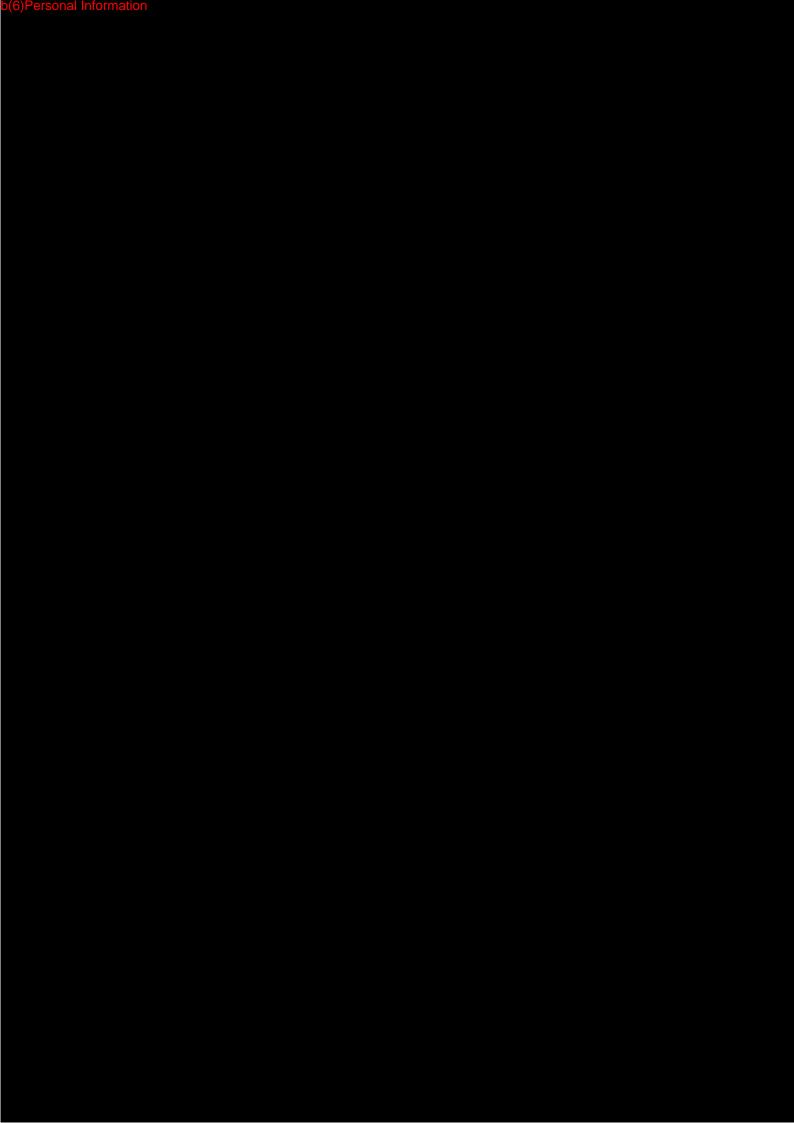


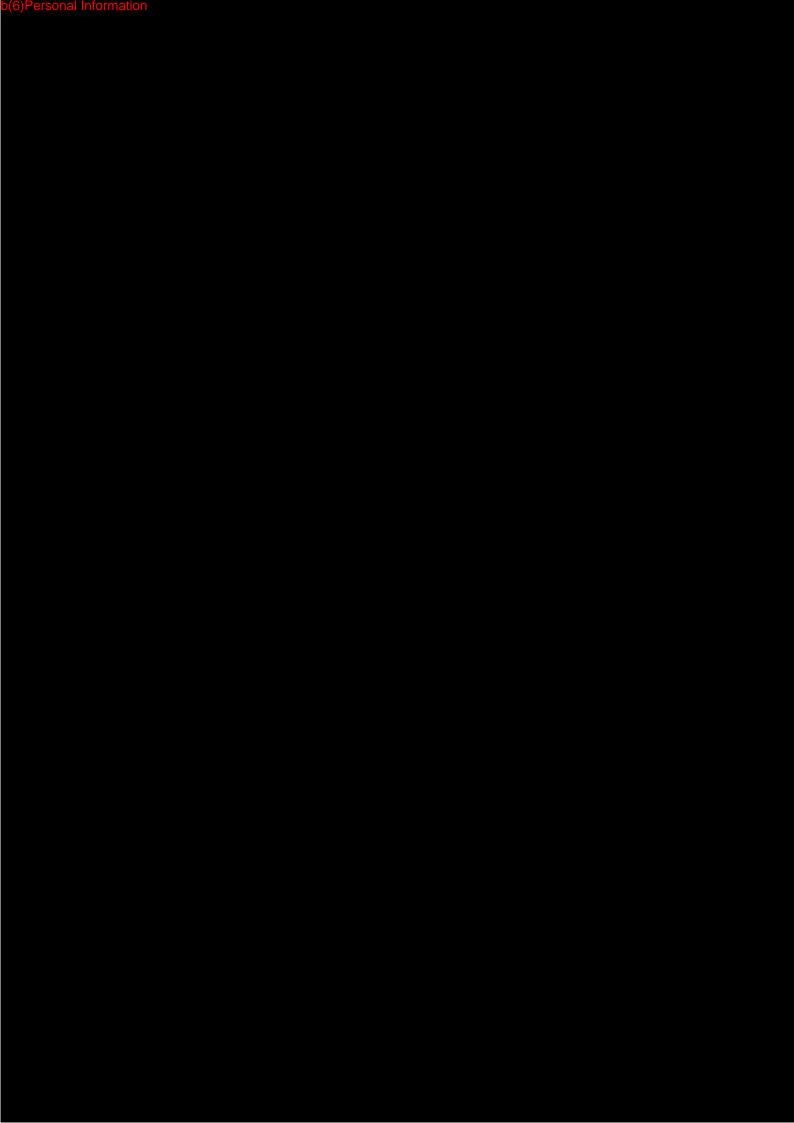












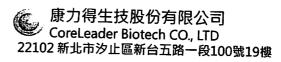


To whom it may concern,

Coreleader Biotech Co., Ltd hereby submits this Traditional 510(k): New Device to get substantial equivalence clearance for our new product CoreLeader HEMO-Bandage before marketing. This new device functions to manage moderate to severe bleedings resulted from traumatic wounds and reduce risk of wound infection as well. We believe CoreLeader HEMO-Bandage is of the similar safety and efficacy as the predicate devices since they have the same fundamental technologies and mode of actions.

T	This is b(4) ubmission of this medical device. The K-number of the previous		
su	abmission is b(4)		
(4)	I DA CDRII DIVIC		
Th	ne required information is briefed as follows,  MAY 0 5 2015		
1.	The in vivo animal study lacks supportive data which show devices.		
2.	The source of chitosan and manufacturing process used for the device are not clearly identified.		
3.	Revise Indications for Statement to clearly (4)		
4.	Provide the reasoning for 5(4) for the measurement parameters in bench test.		
5.	Please provide b(4) and b(4) from positive control testing completed within for the b(4)		
6.	Please provide the information regarding to the (4)		
7.	Please provide evidence showing the medical device will no (4)		
8.	Please provide the results of (b(4))		
9.	Please indicate the (4) in the device on the label.		

We incorporate the required data into each related chapter of this submission to present the complete evidence of substantial equivalence with the predicate. We consider our intent to market this device as confidential commercial information and request that it be treated as such by FDA. We have taken precautions to protect the confidentiality of the intent to market these devices. We understand that the submission to the government of false information is prohibited by 18 U.S.C. 1001 and 21 U.S.C 331 (q).



Thank you in advance for your consideration of our application. If there are any questions, please feel free to contact me at the aforementioned contact information.

Sincerely,

Ya-Wen Kuo

Ya-Wer kno

Manager, Regulatory Affair

CoreLeader Biotech Co., Ltd

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Annex 4	Accelerated aging report	
Annex 5	Biocompatibility_cytotoxicity report	
Annex 6	Biocompatibility_skin irritation report	
Annex 7	Biocompatibility_skin sensitivity report	
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#### DEPARTMENT OF HEALTH AND HUMAN SERVICES

# FOOD AND DRUG ADMINISTRATION MEDICAL DEVICE USER FEE COVER SHEET

#### PAYMENT IDENTIFICATION NUMBER:

Write the Payment Identification number on your check.

A completed cover sheet must accompany each original application or supplement subject to fees. If payment is sent by U.S. mail or courier, please include a copy of this completed form with payment. Payment and mailing instructions can be found at: http://www.fda.gov/oc/mdufma/coversheet.html

1. COMPANY NAME AND ADDRESS (include 2. CONTACT NAME name, street address, city state, country, and post office code)

CORELEADER BIOTECH CO LTD 19F NO 100 SEC 1 SINTAI 5TH RD SIJHIH CITY TAIPEI 22102

TW

EMPLOYER IDENTIFICATION NUMBER (EIN)

- - YaWen Kuo
- 2.1 E-MAIL ADDRESS ywk701@gmail.com
- 2.2 TELEPHONE NUMBER (include Area code) 886-226968880
- 2.3 FACSIMILE (FAX) NUMBER (Include Area code)

TYPE OF PREMARKET APPLICATION (Select one of the following in each column; if you are unsure, please refer to the application descriptions at the following web site:

http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm345263,htm

Select an application type:

3.1 Select a center

[X] Premarket notification(510(k)); except for third party [X] CDRH

[] 513(g) Request for Information []CBER

[] Biologics License Application (BLA) 3.2 Select one of the types below

[] Premarket Approval Application (PMA) [X] Original Application [] Modular PMA Supplement Types:

[] Product Development Protocol (PDP) [] Efficacy (BLA)

[] Premarket Report (PMR) [] Panel Track (PMA, PMR, PDP)

[] 30-Day Notice [] Real-Time (PMA, PMR, PDP)

[] 180-day (PMA, PMR, PDP)

- 4. ARE YOU A SMALL BUSINESS? (See the instructions for more information on determining this status)
- [X] YES, I meet the small business criteria and have submitted NO, I am not a small business the required qualifying documents to FDA
- 4.1 If Yes, please enter your Small Business Decision Number
- FDA WILL NOT ACCEPT YOUR SUBMISSION IF YOUR COMPANY HAS NOT PAID AN ESTABLISHMENT REGISTRATION FEE THAT IS DUE TO FDA. HAS YOUR COMPANY PAID ALL ESTABLISHMENT REGISTRATION FEES THAT ARE DUE TO FDA?
- [X] YES (All of our establishments have registered and paid the fee, or this is our first device, and we will register and pay the fee within 30 days of FDA's approval/clearance of this device.)
- [] NO (If "NO," FDA will not accept your submission until you have paid all fees due to FDA. This submission will not be processed; see http://www.fda.gov/cdrh/mdufma for additional information)
- 6. IS THIS PREMARKET APPLICATION COVERED BY ANY OF THE FOLLOWING USER FEE EXCEPTIONS? IF SO, CHECK THE APPLICABLE EXCEPTION.
  - [] The sole purpose of the application is to

2015/4/27 Site: null

[] This biologics application is submitted under section 351 of the Public Health Service Act for a product licensed for further manufacturing use only  [] The application is submitted by a state or federal government entity for a device that is not to be distributed commercially	[] This application is the first PMA submitted by a qualified small business, including any affiliates	support conditions of use for a pediatric population
	351 of the Public Health Service Act for a product	federal government entity for a device that is

7. IS THIS A SUPPLEMENT TO A PREMARKET APPLICATION FOR WHICH FEES WERE WAIVED DUE TO SOLE USE IN A PEDIATRIC POPULATION THAT NOW PROPOSES CONDITION OF USE FOR ANY ADULT POPULATION? (If so, the application is subject to the fee that applies for an original premarket approval application (PMA).

[]YES |X]NO

#### PAPERWORK REDUCTION ACT STATEMENT

Public reporting burden for this collection of information is estimated to average 18 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the address below.

Department of Health and Human Services, Food and Drug Administration, Office of Chief Information Officer, 8455 Colesville Road, COLE-14-14253 Silver Spring, MD 20993-0002 [Please do NOT return this form to the above address, except as it pertains to comments on the burden estimate.]

8. USER FEE PAYMENT AMOUNT SUBMITTED FOR THIS PREMARKET APPLICATION

(4) 27-Apr-2015

Form FDA 3601 (05/13)

"Close Window" Print Cover sheet

#### DEPARTMENT OF HEALTH AND HUMAN SERVICES FOOD AND DRUG ADMINISTRATION

# CDRH PREMARKET REVIEW SUBMISSION COVER SHEET

Form Approval OMB No. 0910-0120

Expiration Date: December 31, 2013 See PRA Statement on page 5.

Date of Submission	User Fee Payment	ID Number		FDA Submission	n Docume		
04/28/2015	b(4)						
SECTION A		TYPE OF SU	IBMISSION				
PMA	PMA & HDE Supplement	PD		510(k)		Pagus	et for Foodback
Original Submission Premarket Report Modular Submission Amendment Report Report Clicensing Agreement	Regular (180 day)  Special  Panel Track (PMA Only)  30-day Supplement  30-day Notice  135-day Supplement  Real-time Review  Amendment to PMA & HDE Supplement  Other	Original PD Notice of C	ompletion	Original Submis Traditional Special Abbreviated ( section I, Pag Additional Inform	Complete le 5)	Pre-S Inform Subn Day Agree Detel Study	est for Feedback Submission mational Meeting mission Issue Meeting 100 Meeting ement Meeting rmination Meeting y Risk Determination r (specify):
IDE	Humanitarian Device Exemption (HDE)	Class II Exemp	tion Petition	Evaluation of Aut Class III Design	ation	Oth	er Submission
Original Submission Amendment Supplement	Original Submission  Amendment Supplement Report Report Amendment	Original Su		( <b>De Novo</b> )  Original Submis  Additional Infor	sion	☐ 513 ☐ Othe (des	-
Have you used or cited Stand	dards in your submission?	Yes No	(If Yes,	please complete Sec	tion I, Pag	e 5)	
SECTION B	SUBM	ITTER, APPLIC	CANT OR SP	ONSOR			
Company / Institution Name			Establishment F	Registration Number (i	f known)		
CoreLeader Biotech Co., Ltd			3009317711				
Division Name (if applicable)			Phone Number +886-2-269688	(including area code) 80			
Street Address  19F, Build, B, No.100, Sec. 1, 1	Xintai 5th Rd., Xizhi Dist.		FAX Number (iii +886-2-269688	ncluding area code) 882			
City			State / Province	5	ZIP/Postal	Code	Country
New Taipei City				•	221	0040	Taiwan (R.O.C)
Contact Name							I
Ya-Wen Kuo							
Contact Title			Contact E-mail	Address			
Dr.			ywk701@gma	il.com			
SECTION C Company / Institution Name	APPLICATION CORRES	PONDENT (e.	g., consultan	t, if different from	above)		
Division Name (if applicable)			Phone Number	(including area code)			
Street Address			FAX Number (iii	ncluding area code)			
City			State / Province	<u> </u>	ZIP Code		Country
Contact Name							
Contact Title			Contact E-mail	Address			

SECTION D1 RE	ASON FOR APPLICATION - PMA, PDP, OR I	IDE .
New Device  Withdrawal  Additional or Expanded Indications  Request for Extension  Post-approval Study Protocol  Request for Applicant Hold  Request for Removal of Applicant Hold	Change in design, component, or specification:  Software / Hardware Color Additive Material Specifications Other (specify below)	☐ Location change: ☐ Manufacturer ☐ Sterilizer ☐ Packager ☐ Report Submission:
Request to Remove or Add Manufacturing Site  Process change:  Manufacturing Packaging  Sterilization  Other (specify below)  Response to FDA correspondence:	□ Labeling change: □ Indications □ Instructions □ Performance Characteristics □ Shelf Life □ Trade Name □ Other (specify below)	Annual or Periodic Post-approval Study Adverse Reaction Device Defect Amendment  Change in Ownership Change in Correspondent Change of Applicant Address
Other Reason (specify):		
New Device New Indication Addition of Institution Expansion / Extension of Study IRB Certification Termination of Study Withdrawal of Application Unanticipated Adverse Effect Notification of Emergency Use Compassionate Use Request Treatment IDE Continued Access	REASON FOR APPLICATION - IDE  Change in: Correspondent / Applicant Design / Device Informed Consent Manufacturer Manufacturing Process Protocol - Feasibility Protocol - Other Sponsor  Report submission: Current Investigator Annual Progress Report Site Waiver Report Final	Response to FDA Letter Concerning:  Conditional Approval Deemed Approved Deficient Final Report Deficient Progress Report Deficient Investigator Report Disapproval Request Extension of Time to Respond to FDA Request Hearing Request Hearing
Other Reason (specify):		
SECTION D3	REASON FOR SUBMISSION - 510(k)	
New Device	Additional or Expanded Indications	Change in Technology
Other Reason (specify):		

FORM FDA 3514 (1/13) Page 2 of 5 Pages

_		CTION E		امنا					FORMATION	N ON 51	0(	K) SU	ВN	/IISS	IONS	4	Summary of or	statement concerning,
⇈	Т	duct codes of devices to	П	Т	FRO	nce		FRO			. T					$\dashv$	safety and effec	tiveness information
⊩	1	TRO	2 FRO		╨	1100		4						) summary attached				
	5			6			7			8	3					510 (k)	) statement	
Ir	nfo	ormation on devices to w	/hicl	h s	ubstantial equivalence	e is	clair	ned	if known)									
		510(k)	) Νι	uml	ber			Т	rade or Propriet	tary or Mo	ode	∍l Name	)				Man	ufacturer
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-	2	K123387				2	Qu	tikCle	ot® Combat Gau	uze					2 Z	- M	edica, LLC	
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	7		8			9				10					11			12
	Data Included in Submission  Laboratory Testing Animal Trials Human Trials																	
		CTION G		0 0	PRODUCT CL Section (if applicable)	.AS	SSIF	ICA	TION - APPI	LICATION	10			API	PLIC.	ΑТ	IONS	
					CFR 801 Subpart D							Devic	_		Г	_	<b>.</b>	
Classification Panel							$+$ $\vdash$	Cla	ass I	l	'	Class II						
General & Plastic Surgery																		
	Indications (from labeling)  CoreLeader HEMO-Bandage is intended to be used as a topical dressing to temporarily control moderate to severe external bleeding resulted from traumatic or surgical wounds																	

FORM FDA 3514 (1/13)
Page 3 of 5 Pages

Note: Submission of the inneed to submit device esta	nformation entered in Section H do ablishment registration.	oes not affect the	FDA Document Number (if kn	own)		
SECTION H			ERILIZATION SITES REI	LATIN	G TO A SUBMISS	ION
Original	Facility Establishment Identifier (	FEI) Number	Manufacturer	Пс	ontract Sterilizer	
Add Delete	3009317711		Contract Manufacturer	R	epackager / Relabeler	
Company / Institution Nan	l ne		Establishment Registration Nu	umber		
CoreLeader Biotech Co.,	Ltd		3009317711			
Division Name (if applicat	ole)		Phone Number (including area	a code)		
			+886-2-26968880			
Street Address			FAX Number (including area	code)		
19F, Build. B, No.100, S	ec. 1, Xintai 5th Rd		+886-2-26968882			
City			State / Province		ZIP Code	Country
New Taipei City					221	Taiwan (R.O.C)
Contact Name		Contact Title			Contact E-mail Addre	ess
Teeming Tsao		CEO			tsaotm.coreleader@	gmail.com
						g
	Facility Establishment Identifier (	FEI) Number		₩.		
Original	b(4)		Manufacturer	_	ontract Sterilizer	
Add Delete			Contract Manufacturer		epackager / Relabeler	
Company / Institution Nan b(4)	ne		Establishment Registration Nu	umber		
5(1)			D(4)			
Division Name (if applicate	nle)		Phone Number (including area	a code)		
			0(4)			
Stroot Address			FAX Number (including area	code)		
			b(4)			
City			State / Province		ZIP Code	Country
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Company / Institution Nan	ne		Establishment Registration Nu	umber		
Division Name (if applicate	ole)		Phone Number (including area	a code)		
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Street Address			FAX Number (including area of	code)		
City			State / Province		ZIP Code	Country
Contact Name		Contact Title			Contact E-mail Addre	200
Contact Name		Contact Title			Contact E-mail Addre	500

FORM FDA 3514 (1/13) Add Continuation Page Page 4 of 5 Pages

#### SECTION I

#### UTILIZATION OF STANDARDS

**Note:** Complete this section if your application or submission cites standards or includes a "Declaration of Conformity to a Recognized Standard" statement.

1	Standards No. ISO 14971	Standards Organization ISO	Standards Title  Medical devices Application of risk management to medical devices	Version 2007	Date 11/02/2010
2	Standards No. AAMI/ANSI/ISO 11137-1, -2	Standards Organization AAMI/ANSI/ISO	Standards Title  Sterilization of health care products Radiation Part 1: Requirements for development, validation and routine control of a sterilization process for medical devices Part 2: Establishing the sterilization dose	Version 2006	Date 12/23/2005
3	Standards No. ANSI/AAMI/ISO 11737-1, 11737-2	Standards Organization ANSI/AAMI/ISO	Standards Title  Sterilization of medical devices - Microbiological methods - Part 1: Determination of a population of microorganisms on products. Part 2: Tests of sterility performed in the definition, validation and maintenance of a sterility process.	Version 2006	Date 03/23/2006
4	Standards No. ASTM F1980	Standards Organization ASTM	Standards Title  Standard guide for accelerated aging of sterile medical device packages	Version 07	Date 04/01/2007
5	Standards No. ISO 10993-5	Standards Organization ISO	Standards Title  Biological evaluation of medical devices Part 5: Tests for in vitro cytotoxicity	Version 2009	Date 06/18/2009
6	Standards No. ISO 10993-10	Standards Organization ISO	Standards Title  Biological evaluation of medical devices Part 10: Tests for irritation and delayed-type hypersensitivity	Version 2010	Date 09/04/2010
7	Standards No. ISO 10993-11	Standards Organization ISO	Standards Title  Biological evaluation of medical devices Part 11: Tests for systemic toxicity	Version	Date 03/28/2006

#### Please include any additional standards to be cited on a separate page.

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FORM FDA 3514 (1/13) Page 5 of 5 Pages

#### **UTILIZATION OF STANDARDS** SECTION I Note: Complete this section if your application or submission cites standards or includes a "Declaration of Conformity to a Recognized Standard" statement. Standards Organization Standards No. Standards Title Version Date BACTERIAL ENDOTOXINS 2011 USP<85> The United States Standard Endotoxin Stock Solution Pharmacopeial 04/01/2011 1 Convention Standards Organization Standards No. Standards Title Version Date 2 Standards No. Standards Organization Standards Title Version Date 3 Standards Organization Standards No. Standards Title Date Version 4 Standards Organization Standards Title Standards No. Version Date 5 Standards Organization Standards No. Standards Title Version Date 6

Please include any additional standards to be cited on a separate page.

Version

Date

Standards Organization Standards Title

Standards No.

7

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FORM FDA 3514 (1/13) Page 6 of 6 Pages

# STANDARDS DATA REPORT FOR 510(k)s

(To be filled in by applicant)

This report and the Summary Report Table are to be completed by the applicant when submitting a 510(k) that references a national or international standard. A separate report is required for each standard referenced in the 510(k).

TYPE OF 510(K) SUBMISSION			
	Abbreviated		
STANDARD TITLE <sup>1</sup> ISO 14971: Medical devicesApplications of risk management to m	nedical devices		
Please answer the following questions		Yes	No
Is this standard recognized by FDA <sup>2</sup> ?		X	
FDA Recognition number <sup>3</sup>	‡	<b>4</b> 5-40	
Was a third party laboratory responsible for testing conformity in the 510(k)?			×
Is a summary report <sup>4</sup> describing the extent of conformance of 510(k)?		X	
Does the test data for this device demonstrate conformity to t pertains to this device?	•	X	
Does this standard include acceptance criteria?		X	
Does this standard include more than one option or selection If yes, report options selected in the summary report table.	of tests?		X
Were there any deviations or adaptations made in the use of If yes, were deviations in accordance with the FDA supplemental supplementa			×
Were deviations or adaptations made beyond what is specified lf yes, report these deviations or adaptations in the summary			X
Were there any exclusions from the standard?			X
Is there an FDA guidance <sup>6</sup> that is associated with this standard lf yes, was the guidance document followed in preparation of Title of guidance:			
1 The formatting convention for the title is: [SDO] [numeric identifier] [title of standard] [date of publication] 2 Authority [21 U.S.C. 360d], http://www.fda.gov/MedicalDevices/	address of the test laboratory or certification body invo assessment to this standard. The summary report inc all standards utilized during the development of the de	ludes infor evice.	mation on

- DeviceRegulationandGuidance/Standards/default.htm
- 3 http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfStandards/search.cfm
- <sup>4</sup> The summary report should include: any adaptations used to adapt to the device under review (for example, alternative test methods); choices made when options or a selection of methods are described; deviations from the standard; requirements not applicable to the device; and the name and
- The supplemental information sheet (SIS) is additional information which is necessary before FDA recognizes the standard. Found at http:// www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfStandards/search.cfm
- 6 The online search for CDRH Guidance Documents can be found at http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/ GuidanceDocuments/default.htm

# EXTENT OF STANDARD CONFORMANCE SUMMARY REPORT TABLE STANDARD TITLE IISO 14971: Medical devices--Applications of risk management to medical devices CONFORMANCE WITH STANDARD SECTIONS\* SECTION NUMBER SECTION TITLE CONFORMANCE? All Risk Analysis X Yes No N/A TYPE OF DEVIATION OR OPTION SELECTED \* Use FMEA model to analysis hazard level before and after risk reduction DESCRIPTION The hazards of HEMO-Bandage are identified and reduced. JUSTIFICATION All identified risks of HEMO-Bandage are reduced to the acceptive level. SECTION NUMBER SECTION TITLE CONFORMANCE? Yes No N/A TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION JUSTIFICATION SECTION NUMBER SECTION TITLE CONFORMANCE? Yes No N/A TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION JUSTIFICATION \* For completeness list all sections of the standard and indicate whether conformance is met. If a section is not applicable (N/A) an explanation is needed under "justification." Some standards include options, so similar to deviations, the option chosen needs to be described and adequately justified as appropriate for the subject device. Explanation of all deviations or description of options selected when following a standard is required under "type of deviation or option selected," "description" and "justification" on the report. More than one page may be necessary. \* Types of deviations can include an exclusion of a section in the standard, a deviation brought out by the FDA supplemental information sheet (SIS), a deviation to adapt the standard to the device, or any adaptation of a section.

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- <sup>4</sup> The summary report should include: any adaptations used to adapt to the device under review (for example, alternative test methods); choices made when options or a selection of methods are described; deviations from the standard; requirements not applicable to the device; and the name and
- 6 The online search for CDRH Guidance Documents can be found at http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/default.htm

EXTENT OF STANDARD CONFORMANCE SUMMARY REPORT TABLE						
STANDARD TITLE AAMI ANSI ISO 111	STANDARD TITLE AAMI ANSI ISO 11137-1:2006/(R) 2010, Sterilization of health care products - Radiation					
	CONFORMANCE WITH STANDARD SECTIONS*					
SECTION NUMBER	SECTION TITLE	CONFORM	ANCE?			
8	Process definition	X Yes	☐ No	□ N/A		
TYPE OF DEVIATION OF	R OPTION SELECTED *					
DESCRIPTION Ensure the safety of ra	diation process and sterilization result.					
JUSTIFICATION HEMO-bandage is sui	table for gamma-radiation.					
SECTION NUMBER	SECTION TITLE	CONFORM	ANCE?			
		Yes	☐ No	□ N/A		
TYPE OF DEVIATION OF	R OPTION SELECTED *					
DESCRIPTION						
JUSTIFICATION						
SECTION NUMBER	SECTION TITLE	CONFORM	ANCE?			
		Yes	☐ No	N/A		
TYPE OF DEVIATION OF	R OPTION SELECTED *					
DESCRIPTION						
JUSTIFICATION						
explanation is neededescribed and adequeselected when follow report. More than on Types of deviations of	t all sections of the standard and indicate whether conformance is met. If a section d under "justification." Some standards include options, so similar to deviations, the lately justified as appropriate for the subject device. Explanation of all deviations or ing a standard is required under "type of deviation or option selected," "description is page may be necessary.  It is an include an exclusion of a section in the standard, a deviation brought out by the S), a deviation to adapt the standard to the device, or any adaptation of a section.	e option che r description " and "justif e FDA supp	osen nee n of optio ication" o	eds to be ons on the		
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- ¹ The formatting convention for the title is: [SDO] [numeric identifier] [title of standard] [date of publication]
- <sup>2</sup> Authority [21 U.S.C. 360d], http://www.fda.gov/MedicalDevices/ DeviceRegulationandGuidance/Standards/default.htm

Title of guidance:

- <sup>3</sup> http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfStandards/search.cfm
- <sup>4</sup> The summary report should include: any adaptations used to adapt to the device under review (for example, alternative test methods); choices made when options or a selection of methods are described; deviations from the standard; requirements not applicable to the device; and the name and
- address of the test laboratory or certification body involved in conformance assessment to this standard. The summary report includes information on all standards utilized during the development of the device.
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If yes, was the guidance document followed in preparation of this 510k? .....

# **EXTENT OF STANDARD CONFORMANCE** SUMMARY REPORT TABLE STANDARD TITLE AAMI / ANSI / ISO 11137-2:2012, Sterilization of health care products - Radiation - Part 2: Establishing the sterilization dose. **CONFORMANCE WITH STANDARD SECTIONS\*** SECTION TITLE SECTION NUMBER CONFORMANCE? Dose setting using bioburden information X Yes No N/A TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION Determine the gamma radiation dose for HEMO-bandage. JUSTIFICATION HEMO-bandage is sterilized with 25 kGy gamma radiation. SECTION NUMBER SECTION TITLE CONFORMANCE? Yes No N/A TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION JUSTIFICATION SECTION NUMBER SECTION TITLE CONFORMANCE? Yes N/A No TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION JUSTIFICATION For completeness list all sections of the standard and indicate whether conformance is met. If a section is not applicable (N/A) an explanation is needed under "justification." Some standards include options, so similar to deviations, the option chosen needs to be described and adequately justified as appropriate for the subject device. Explanation of all deviations or description of options selected when following a standard is required under "type of deviation or option selected," "description" and "justification" on the report. More than one page may be necessary. Types of deviations can include an exclusion of a section in the standard, a deviation brought out by the FDA supplemental information sheet (SIS), a deviation to adapt the standard to the device, or any adaptation of a section. This section applies only to requirements of the Paperwork Reduction Act of 1995.

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# **EXTENT OF STANDARD CONFORMANCE** SUMMARY REPORT TABLE STANDARD TITLE ASTM F1980-07, Standard Guide for Accelerated Aging of Sterile Barrier Systems for Medical Devices. **CONFORMANCE WITH STANDARD SECTIONS\*** SECTION TITLE SECTION NUMBER CONFORMANCE? Accelerated aging plan X Yes No N/A TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION Assess shelf-life of HEMO-bandage JUSTIFICATION The shelf-life of HEMO-bandage is determined to be 3 years. SECTION NUMBER SECTION TITLE CONFORMANCE? Maximization test for delayed hypersensitivy Yes No N/A TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION Assess dermal sensitivity on guinea pigs after treated with HEMO-bandage extraction. JUSTIFICATION HEMO-bandage does not cause dermal sensitivity. SECTION NUMBER SECTION TITLE CONFORMANCE? N/A Yes No TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION JUSTIFICATION For completeness list all sections of the standard and indicate whether conformance is met. If a section is not applicable (N/A) an explanation is needed under "justification." Some standards include options, so similar to deviations, the option chosen needs to be described and adequately justified as appropriate for the subject device. Explanation of all deviations or description of options selected when following a standard is required under "type of deviation or option selected," "description" and "justification" on the report. More than one page may be necessary. Types of deviations can include an exclusion of a section in the standard, a deviation brought out by the FDA supplemental information sheet (SIS), a deviation to adapt the standard to the device, or any adaptation of a section. This section applies only to requirements of the Paperwork Reduction Act of 1995.

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- <sup>4</sup> The summary report should include: any adaptations used to adapt to the device under review (for example, alternative test methods); choices made when options or a selection of methods are described; deviations from the standard; requirements not applicable to the device; and the name and
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# **EXTENT OF STANDARD CONFORMANCE** SUMMARY REPORT TABLE STANDARD TITLE AAMI / ANSI / ISO 10993-5:2009, Biological evaluation of medical devices -- Part 5: Tests for In Vitro cytotoxicity. **CONFORMANCE WITH STANDARD SECTIONS\*** SECTION NUMBER SECTION TITLE CONFORMANCE? 4.2 Tests for in vitro cytotoxicity Yes No N/A TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION HEMO-bandage did not raise cytotoxicity signs. JUSTIFICATION HEMO-bandage is not cytotoxic. SECTION NUMBER SECTION TITLE CONFORMANCE? Yes No N/A TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION JUSTIFICATION SECTION NUMBER SECTION TITLE CONFORMANCE? Yes N/A No TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION JUSTIFICATION For completeness list all sections of the standard and indicate whether conformance is met. If a section is not applicable (N/A) an explanation is needed under "justification." Some standards include options, so similar to deviations, the option chosen needs to be described and adequately justified as appropriate for the subject device. Explanation of all deviations or description of options selected when following a standard is required under "type of deviation or option selected," "description" and "justification" on the report. More than one page may be necessary. Types of deviations can include an exclusion of a section in the standard, a deviation brought out by the FDA supplemental information sheet (SIS), a deviation to adapt the standard to the device, or any adaptation of a section. This section applies only to requirements of the Paperwork Reduction Act of 1995.

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STANDARDS DATA	REPORT FOR 510(k)s n by applicant)		
This report and the Summary Report Table are to be compences a national or international standard. A separate repor			
TYPE OF 510(K) SUBMISSION			
	Abbreviated		
STANDARD TITLE <sup>1</sup> AAMI ANSI ISO 10993-10:2010:Tests for irritation and delayed-t	ype hypersensitivity		
Please answer the following questions		Yes	No
Is this standard recognized by FDA <sup>2</sup> ?		X	
FDA Recognition number <sup>3</sup>		<b>#</b> 2-152	
Was a third party laboratory responsible for testing conform in the 510(k)?		X	
Is a summary report <sup>4</sup> describing the extent of conformance 510(k)?		X	
Does the test data for this device demonstrate conformity to pertains to this device?		X	
Does this standard include acceptance criteria?		X	
Does this standard include more than one option or selection of the select	n of tests?	X	
Were there any deviations or adaptations made in the use of lf yes, were deviations in accordance with the FDA supplementary.			$\boxtimes$
Were deviations or adaptations made beyond what is specifically specif			X
Were there any exclusions from the standard?  If yes, report these exclusions in the summary report table.			X
Is there an FDA guidance <sup>6</sup> that is associated with this stand If yes, was the guidance document followed in preparation of Title of guidance:			X
The formatting convention for the title is: [SDO] [numeric identifier] [title of standard] [date of publication]  Authority [21 U.S.C. 360d], http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/Standards/default.htm	address of the test laboratory or certification body inv assessment to this standard. The summary report inc all standards utilized during the development of the de 5 The supplemental information sheet (SIS) is addition	ludes infor evice. al informati	mation on on on on which
<ul> <li>http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfStandards/search.cfm</li> <li>The summary report should include: any adaptations used to adapt to the device under review (for example, alternative test methods); choices made when options or a selection of methods are described; deviations from the standard; requirements not applicable to the device; and the name and</li> </ul>	is necessary before FDA recognizes the standard. For www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfStandard.  The online search for CDRH Guidance Documents can http://www.fda.gov/MedicalDevices/DeviceRegulation GuidanceDocuments/default.htm	ards/search an be found	n.cfm d at

EXTENT OF STANDARD CONFORMANCE SUMMARY REPORT TABLE					
STANDARD TITLE AAMI ANSI ISO 1099	93-10:2010:Tests for irritation and delayed-type hypersensitivity				
	CONFORMANCE WITH STANDARD SECTIONS*				
SECTION NUMBER	SECTION TITLE	CONFORM	ANCE?		
6.3	Irritation tests		☐ No	□ N/A	
TYPE OF DEVIATION OF	R OPTION SELECTED *				
DESCRIPTION Assess dermal irritation	n on rabbits after treated with HEMO-bandage extraction				
JUSTIFICATION HEMO-bandage does i	not cause dermal irritation.				
SECTION NUMBER	SECTION TITLE	CONFORM	ANCE?		
7.4	Maximization test for delayed hypersensitivy		□ No	□ N/A	
DESCRIPTION	R OPTION SELECTED * ity on guinea pigs after treated with HEMO-bandage extraction.				
JUSTIFICATION HEMO-bandage does i	not cause dermal sensitivity.				
SECTION NUMBER	SECTION TITLE	CONFORM	ANCE?		
		Yes	☐ No	N/A	
TYPE OF DEVIATION OF	R OPTION SELECTED *				
DESCRIPTION					
JUSTIFICATION					
explanation is needed described and adequeselected when follow report. More than on Types of deviations of	t all sections of the standard and indicate whether conformance is met. If a section d under "justification." Some standards include options, so similar to deviations, the lately justified as appropriate for the subject device. Explanation of all deviations or ing a standard is required under "type of deviation or option selected," "description is page may be necessary.  It is an include an exclusion of a section in the standard, a deviation brought out by the S), a deviation to adapt the standard to the device, or any adaptation of a section.	ne option char or description or and "justif ne FDA supp	osen nee n of optio fication" o	eds to be ons on the	
	This section applies only to requirements of the Panerwork Reduction Act of 1005				

This section applies only to requirements of the Paperwork Reduction Act of 1995

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Department of Health and Human Services Food and Drug Administration Office of Chief Information Officer Paperwork Reduction Act (PRA) Staff PRAStaff@fda.hhs.gov

# STANDARDS DATA REPORT FOR 510(k)s

(To be filled in by applicant)

This report and the Summary Report Table are to be completed by the applicant when submitting a 510(k) that references a national or international standard. A separate report is required for each standard referenced in the 510(k).

TYPE OF 510(K) SUBMISSION			
Traditional ☐ Special	Abbreviated		
STANDARD TITLE <sup>1</sup> ISO 10993-11: Biological evaluation of medical devices part 11: Tes	ts for systemic toxicity		
Please answer the following questions		Yes	No
Is this standard recognized by FDA <sup>2</sup> ?		X	
FDA Recognition number <sup>3</sup>		<b>#</b> 2-176	
Was a third party laboratory responsible for testing conformity in the 510(k)?		X	
Is a summary report <sup>4</sup> describing the extent of conformance of 510(k)?		X	
Does the test data for this device demonstrate conformity to the pertains to this device?	•	X	
Does this standard include acceptance criteria?		X	
Does this standard include more than one option or selection If yes, report options selected in the summary report table.	of tests?		X
Were there any deviations or adaptations made in the use of the liftyes, were deviations in accordance with the FDA supplement			×
Were deviations or adaptations made beyond what is specifie If yes, report these deviations or adaptations in the summary			X
Were there any exclusions from the standard?			X
Is there an FDA guidance <sup>6</sup> that is associated with this standa If yes, was the guidance document followed in preparation of Title of guidance:			
standard] [date of publication]  Authority [21 U.S.C. 360d], http://www.fda.gov/MedicalDevices/ DeviceRegulationandGuidance/Standards/default.htm 5	address of the test laboratory or certification body invo assessment to this standard. The summary report incl all standards utilized during the development of the de The supplemental information sheet (SIS) is additional is necessary before FDA recognizes the standard. Fo www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfStanda	ludes inform evice. Il information und at http	mation on on which o://

- 4 The summary report should include: any adaptations used to adapt to the device under review (for example, alternative test methods); choices made when options or a selection of methods are described; deviations from the standard; requirements not applicable to the device; and the name and
- 6 The online search for CDRH Guidance Documents can be found at http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/ GuidanceDocuments/default.htm

# EXTENT OF STANDARD CONFORMANCE SUMMARY REPORT TABLE STANDARD TITLE ISO 10993-11 CONFORMANCE WITH STANDARD SECTIONS\* SECTION TITLE SECTION NUMBER CONFORMANCE? All Tests for systemic toxicity ✓ Yes No N/A TYPE OF DEVIATION OR OPTION SELECTED \* Intravenous and Intraperitoneal acute systemic test DESCRIPTION HEMO-Bandage is tested for these two scenario. JUSTIFICATION HEMO-Bandage is proved not inducing systemic reactions SECTION NUMBER SECTION TITLE CONFORMANCE? Yes No N/A TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION JUSTIFICATION SECTION NUMBER SECTION TITLE CONFORMANCE? N/A Yes No TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION JUSTIFICATION \* For completeness list all sections of the standard and indicate whether conformance is met. If a section is not applicable (N/A) an explanation is needed under "justification." Some standards include options, so similar to deviations, the option chosen needs to be described and adequately justified as appropriate for the subject device. Explanation of all deviations or description of options selected when following a standard is required under "type of deviation or option selected," "description" and "justification" on the report. More than one page may be necessary. \* Types of deviations can include an exclusion of a section in the standard, a deviation brought out by the FDA supplemental information sheet (SIS), a deviation to adapt the standard to the device, or any adaptation of a section.

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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# STANDARDS DATA REPORT FOR 510(k)s

(To be filled in by applicant)

This report and the Summary Report Table are to be completed by the applicant when submitting a 510(k) that references a national or international standard. A separate report is required for each standard referenced in the 510(k).

T/DE 05 510/0 01/01/00/01/			
TYPE OF 510(K) SUBMISSION  Traditional Special	Abbreviated		
STANDARD TITLE <sup>1</sup> USP <85> Bacterial endotoxins test. (Sterility)			
Please answer the following questions		Yes	No
Is this standard recognized by FDA <sup>2</sup> ?		X	
FDA Recognition number <sup>3</sup>	#	<b>#</b> 14-442	
Was a third party laboratory responsible for testing conformin the 510(k)?	-	X	
Is a summary report <sup>4</sup> describing the extent of conformance 510(k)?  If no, complete a summary report table.		X	
Does the test data for this device demonstrate conformity to pertains to this device?	X		
Does this standard include acceptance criteria?	X		
Does this standard include more than one option or selection of the summary report table.		×	
Were there any deviations or adaptations made in the use of lf yes, were deviations in accordance with the FDA supplemental supplementa		×	
Were deviations or adaptations made beyond what is specifif yes, report these deviations or adaptations in the summary			X
Were there any exclusions from the standard?			X
Is there an FDA guidance <sup>6</sup> that is associated with this stand If yes, was the guidance document followed in preparation of Title of guidance:			$\boxtimes$
1 The formatting convention for the title is: [SDO] [numeric identifier] [title of standard] [date of publication] 2 Authority [21 U.S.C. 360d], http://www.fda.gov/MedicalDevices/	address of the test laboratory or certification body invo- assessment to this standard. The summary report incl all standards utilized during the development of the de	ludes infor evice.	mation on

- 3 http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfStandards/search.cfm
- <sup>4</sup> The summary report should include: any adaptations used to adapt to the device under review (for example, alternative test methods); choices made when options or a selection of methods are described; deviations from the standard; requirements not applicable to the device; and the name and
- is necessary before FDA recognizes the standard. Found at http:// www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfStandards/search.cfm
- $_{\mbox{\scriptsize 6}}$  The online search for CDRH Guidance Documents can be found at http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/ GuidanceDocuments/default.htm

# EXTENT OF STANDARD CONFORMANCE SUMMARY REPORT TABLE STANDARD TITLE USP <85> Bacterial endotoxins test. (Sterility) CONFORMANCE WITH STANDARD SECTIONS\* SECTION TITLE SECTION NUMBER CONFORMANCE? 85 Bacterial endotoxins test ✓ Yes No N/A TYPE OF DEVIATION OR OPTION SELECTED \* LAL test is used. DESCRIPTION The acceptance criteria is $< 0.5 \,\mathrm{EU/ml}$ JUSTIFICATION HEMO-Bandage fulfills the criteria. SECTION NUMBER SECTION TITLE CONFORMANCE? Yes No N/A TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION JUSTIFICATION SECTION NUMBER SECTION TITLE CONFORMANCE? N/A Yes No TYPE OF DEVIATION OR OPTION SELECTED \* DESCRIPTION JUSTIFICATION \* For completeness list all sections of the standard and indicate whether conformance is met. If a section is not applicable (N/A) an explanation is needed under "justification." Some standards include options, so similar to deviations, the option chosen needs to be described and adequately justified as appropriate for the subject device. Explanation of all deviations or description of options selected when following a standard is required under "type of deviation or option selected," "description" and "justification" on the report. More than one page may be necessary. \* Types of deviations can include an exclusion of a section in the standard, a deviation brought out by the FDA supplemental information sheet (SIS), a deviation to adapt the standard to the device, or any adaptation of a section.

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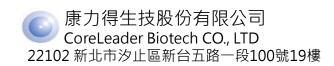
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# Chapter 3 510(k) Cover Letter

# Chapter 3 510(k) Cover letter



Date: 9<sup>th</sup> April 2015

Food and Drug Administration

Center for Devices and Radiological Health

Document Mail Center WO66-G609

10903 New Hampshire Avenue, Silver Spring, Maryland 20993-0002

# **Traditional 510(k): New Device Submission**

Device Name: CoreLeader HEMO-Bandage

Common Name: Topical wound dressing

K Number: unknown

Class Unclassified

Panel General & Plastic Surgery

510(k) Submitter: CoreLeader Biotech Co., Ltd.

19F, No. 100, Sec. 1, Xintai 5th Rd., Xizhi Dist.,

New Taipei City, Taiwan, R.O.C. 22102

Phone: +886-2-26968880

Fax: +886-2-26968882

Contact Person: Ya-Wen Kuo

Manager, Regulatory Affair

19F, No. 100, Sec. 1, Xintai 5th Rd., Xizhi Dist.,

New Taipei City, Taiwan, R.O.C. 22102

Phone: +886-2-26968880 FAX: +886-2-26968882

E-mail: ywk@coreleaderbio.com

eCopy Statement: The eCopy is an exact duplicate of the paper copy.

To whom it may concern,

9. Please indicate the (4)

Coreleader Biotech Co., Ltd hereby submits this Traditional 510(k): New Device to get substantial equivalence clearance for our new product CoreLeader HEMO-Bandage before marketing. This new device functions to manage moderate to severe bleedings resulted from traumatic wounds and reduce risk of wound infection as well. We believe CoreLeader HEMO-Bandage is of the similar safety and efficacy as the predicate devices since they have the same fundamental technologies and mode of actions.

Th	submission of this medical device. The K-number of the previous
su	bmission is <mark>b(4)</mark>
Th	ne required information is briefed as follows,
1	The in vivo animal study lacks supportive data which show (4)
1.	devices.
2.	The source of chitosan and manufacturing process used for the device are not clearly
	identified.
<i>3</i> .	Revise Indications for Statement to clearly 5(4)
<i>4</i> .	Provide the reasoning for b(4) for the measurement parameters in bench
	test.
<i>5</i> .	Please provide a 5(4) and 5(4) from positive control testing completed within 5(4)
	for the <mark>b(4)</mark>
<i>6</i> .	Please provide the information regarding to the <mark>5(4)</mark>
<i>7</i> .	Please provide evidence showing the medical device will not <b>6(4)</b>
8.	Please provide the results of 500

We incorporate the required data into each related chapter of this submission to present the complete evidence of substantial equivalence with the predicate. We consider our intent to market this device as confidential commercial information and request that it be treated as such by FDA. We have taken precautions to protect the confidentiality of the intent to market these devices. We understand that the submission to the government of false information is prohibited by 18 U.S.C. 1001 and 21 U.S.C 331 (q).

in the device on the label.

# Chapter 3 510(k) Cover letter



Thank you in advance for your consideration of our application. If there are any questions, please feel free to contact me at the aforementioned contact information.

Sincerely,

Ya-Wen Kuo

Ya-Wer Kno

Manager, Regulatory Affair

CoreLeader Biotech Co., Ltd

# Table 3 Design and Use of the Device

Question	YES	NO
Is the device intended for prescription use (21 CFR 801 Subpart D)? A	YES	
Is the device intended for over-the-counter use (21 CFR 807 Subpart C)? <sup>A</sup>		NO
Does the device contain components derived from a tissue or other biologic source?	YES	
Is the device provided sterile?	YES	
Is the device intended for single use?	YES	
Is the device a reprocessed single use device?		NO
If yes, does this device type require reprocessed validation data?		NO
Does the device contain a drug?		NO
Does the device contain a biologic?		NO
Does the device use software?		NO
Does the submission include clinical information?		NO
Is the device implanted?		NO

<sup>&</sup>lt;sup>A</sup>: A device may be intended for both prescription and over-the-counter use. If so, the answer to both of these questions is yes.

# Chapter 4 Indications for Use Statement

# **Indications for Use Statement**

510(k) Number (if known):	
Device Name: CoreLeader HEMO-Bandage	
Indications for Use:	
CoreLeader HEMO-Bandage is intended to be used as a top temporarily control moderate to severe external bleeding resulted or surgical wounds.	J
Prescription Use X AND/OR Over-The-Counter Use (Part 21 CFR 801 Subpart D) (21 CFR 801 Subpart C	
(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOT NEEDED)	HER PAGE IF
Concurrence of CDRH, Office of Device Evaluation (O	 DE)
	Page 1 of 1

# Chapter 5 510(k) Summery

# 510(k) Summary

Submitted by: Coreleader Biotech Co., Ltd.

19F, No. 100, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei

City, Taiwan, R.O.C. 22102

Phone: +886-2-26968880 FAX: +886-2-26968882

Contact Person: Ya-Wen Kuo Date Prepared: 2014/03/19

Proprietary Name: CoreLeader HEMO-Bandage

Common Name: Topical hemostasis wound dressing

Classification: Unclassified

Classification

Dressing, Wound, Drug

Name:

Predicate Device: 1. HemCon Chitoflex surgical wound dressing (HemCon

Medical Technologies, Inc): K080818

2. QuikClot® Hemostatic Dressing, as known as QuikClot®

Combat Gauze (Z-Medica, LLC): K123387

3. Celox Gauze PRO/OTC (Medtrade Products Ltd): K113560

# **Device Description:**

CoreLeader HEMO-Bandage is woven gauze made of chitosan fiber and rayon fiber. Chitosan is a type of organic polysaccharide carrying positively-charged ions. Appearing light yellow color and inheriting biodegradability and biocompatibility of chitosan, CoreLeader HEMO-Bandage achieves hemostasis by attracting erythrocytes to the injured sites and facilitates blood clot formation. CoreLeader HEMO-Bandage is sterilized by gamma-ray radiation to 10<sup>-6</sup> SAL after packed in a foil bag. With the softness and flexibility, it is readily conformable to various wound shapes.

## **Indications for Use:**

CoreLeader HEMO-Bandage is intended to be used as a topical dressing to temporarily control moderate to severe external bleeding resulted from traumatic or surgical wounds.

#### **Substantial equivalence:**

The safety and efficacy of CoreLeader HEMO-Bandage wound dressing are substantially equivalent to the predicate devices, including HemCon Chitoflex surgical wound dressing (HemCon Medical Technologies, Inc, K080818) and QuikClot® Hemostatic Dressing, as known as QuikClot® Combat Gauze (Z-Medica, LLC, K123387), in the aspect of the mode of action, dressing form, indications for use,

biocompatibility, sterilization degree and hemostasis efficacy.

Indications for use: Similar to HemCon Chitoflex surgical wound dressing and QuikClot® Combat Gauze, CoreLeader HEMO-Bandage is intended to be used as a topical dressing to temporarily control moderate to severe external bleeding resulted from traumatic or surgical wounds.

#### 2 Mode of action in hemostasis:

Similar to HemCon Chitoflex and Celox Gauze, the effective ingredient of CoreLeader HEMO-Bandage that helps stop bleeding is chitosan, which facilitates hemostatic activity by ion electrostatic bonding mechanism.

#### 3 Form:

Similar to HemCon Chitoflex surgical wound dressing and QuikClot® Combat Gauze, CoreLeader HEMO-Bandage appears as flat sheet of gauze with various sizes to fit in different shape of wounds.

#### 4 Materials:

Chitosan: Similar to HemCon Chitoflex surgical wound dressing, CoreLeader HEMO-Bandage uses unique ion electrostatic properties of chitosan to facilitate hemostasis activity.

Rayon: Similar to HemCon Chitoflex surgical wound dressing and QuikClot® Combat Gauze, CoreLeader HEMO-Bandage incorporates a textile in addition to effective ingredient to form the gauze dressing..

# 5 Non-clinical tests

- **6.1 Sterility:** Similar to HemCon Chitoflex surgical wound dressing and QuikClot® Combat Gauze, CoreLeader HEMO-Bandage is sterilized to 10<sup>-6</sup> SAL using gamma ray. The sterilization validation tests meet the criteria of AAMI / ANSI / ISO 11137-1, -2: 2006.
- **6.2 Shelf life:** The shelf life of CoreLeader HEMO-Bandage is 3 years when the product is stored at room temperature without sun light exposure. The shelf life of HemCon Chitoflex surgical wound dressing is 2 years, while QuikClot® Combat Gauze is 3 years.
- **6.3 Biocompatibility:** CoreLeader HEMO-Bandage is as biocompatible as all the predicates.

- **6.3.1** Cytotoxicity: CoreLeader HEMO-Bandage passes *in vitro* cytotoxicity test required in AAMI / ANSI / ISO 10993-5.
- **6.3.2** Skin irritation test: CoreLeader HEMO-Bandage passes *in vivo* rabbit skin irritation test required in AAMI / ANSI / ISO 10993-10.
- **6.3.3** Skin sensitization: CoreLeader HEMO-Bandage passes *in vivo* guinea pig skin sensitization test required in AAMI / ANSI / ISO 10993-10.

## **6.4 Performance:**

- **6.4.1** Water absorption: As the above mentioned predicate devices, CoreLeader HEMO-Bandage is fluid absorbent.
- **6.4.2** Hemostasis achievement: CoreLeader HEMO-Bandage is capable of stop bleeding due to the nature of chitosan. CoreLeader HEMO-Bandage is proved to achieve arterial hemostasis in *in vivo* swine femoral arterial hemorrhage model.
- 7 Directions to use: The direction of use of CoreLeader HEMO-Bandage is similar to those of HemCon Chitoflex surgical wound dressing and QuikClot® Combat Gauze. CoreLeader HEMO-Bandage should be directly packed or pressed against the bleeding wounds until the hemostasis is achieved. Proper saline irrigation should be applied when removing CoreLeader HEMO-Bandage from the wound.

Table 1. The list of non-clinical tests conducted to validate the safety and efficacy of CoreLeader HEMO-Bandage to achieve the indications as claimed.

Test	Result	Guidance
Sterilization validation tests	CoreLeader HEMO-Bandage	AAMI / ANSI / ISO
	is sterile to 10 <sup>-6</sup> SAL after	11137-1, -2: 2006
	gamma radiation.	
Shelf life test	CoreLeader HEMO-Bandage	ASTM F1980-07
	is expired 3 years after	
	manufacturing.	
In vitro cytotoxicity test	No cytotoxicity	AAMI / ANSI / ISO
		10993-5:2009
<i>In vivo</i> guinea pig skin	No skin sensitization	AAMI / ANSI / ISO
sensitization test		10993-10: 2010.
<i>In vivo</i> rabbit skin irritation	No skin irritation	AAMI / ANSI / ISO

test		10993-10: 2010.
<i>In vivo</i> systemic toxicity test	Non-systemic toxic	AAMI / ANSI / ISO
		10993-11: 2006.
Heavy metal residue test	Free of heavy metal	Journal of AOAC
	contamination	International, 2006;
		89(6): 1447-66
Fluid absorption rate	CoreLeader HEMO-Bandage	EN 13726-1:2002
	is water absorbent.	—Part 1
Tensile strength	CoreLeader HEMO-Bandage	In-house protocol
	is tensile resistant.	
<i>In vivo</i> hemostasis test	CoreLeader HEMO-Bandage	In-house protocol
	can temporarily control	
	moderate to severe bleedings	
	resulted from traumatic or	
	surgical wounds.	

**Table 2.** A comparison of non-clinical testing results of CoreLeader HEMO-Bandage with the predicate devices

	Proposed device	Predicate device		
	CoreLeader	HemCon®	CELOX Gauze	QuikClot®
	HEMO-Bandage	Chitoflex	PRO	Combat Gauze
K number	K141198	K0808018	K113560	K123387
Indications	CoreLeader	QuikClot®	CELOX	Rx indication:
	HEMO-Bandage	Combat Gauze is	Gauze PRO is	Hemostatic
	is intended to be	intended to use as	indicated for	dressing for
	used as a topical	a topical dressing	minor wound	temporary
	dressing to	for local	control,	control of
	temporarily	management of	including	severely
	control	bleeding wounds	control of	bleeding
	moderate to	such as cuts,	minor external	wounds
	severe bleeding	lacerations and	bleeding and	intended for
	resulted from	abrasions. It may	exudate from	emergency
	traumatic or	also be used for	sutures and/or	use.
	surgical wounds.	temporary	surgical	
		treatment of	procedures	
		severely bleeding		
		wounds such as		
		surgical wounds		
		(operative,		
		postoperative,		
		dermatological,		
		etc.) and		
		traumatic		
		injuries.		

Mode of action	Electrostasis nature of chitosan	Electrostasis nature of chitosan	Electrostasis nature of chitosan	Electrostasis nature of kaolin
Sterilization	Gamma	Gamma radiation	Gamma	Gamma
	radiation to 10 <sup>-6</sup> SAL		radiation	radiation
Shelf life	3 years	2 years	3 years	3 years
Cytotoxicity test	Negative	Negative	Negative	Negative
Skin irritation test	Negative	Negative	Negative	Negative
Skin sensitization test	Negative	Negative	Negative	Negative
Systemic toxicity test	Negative	Negative	Negative	Negative
In vivo	Achieve	Facilitate	Facilitate	Facilitate
swine	hemostasis of	hemostasis	hemostasis	hemostasis
hemostasis	femoral artery			
test	hemorrhage <			
	10 minutes.			

# **Substantial Equivalent Statement**

Based on the comparison of intended use, design, mode of actions, and performance, CoreLeader HEMO-Bandage is substantial equivalent to its predicate devices.

# Chapter 6 Truthful and Accurate Statement

### Chapter 6 Truthful and Accurate Statement

### **Truthful and Accurate Statement**

I certify that, in my capacity as a manager of Regulatory Affair of CoreLeader Biotech Co., Ltd, I believe, to the best of my knowledge, that all data and information submitted in the premarket notification are truthful and accurate and that no material fact has been omitted.

Ya-Wen Kuo

Manager, Regulatory Affair CoreLeader Biotech Co., Ltd

Ya-Wen Kuo

Typed Name

2015/04/28

Date

\*(Premarket Notification [510(k)] Number)

\*For a new submission, leave the 510(k) number blank.

Must be signed by a responsible person of the firm required to submit the premarket notification [e.g., not a consultant for the 510(k) submitter].

### Chapter 7 Class III Summary and Certification

(Not Applicable)

## Chapter 8 Financial Certification or Disclosure Statement

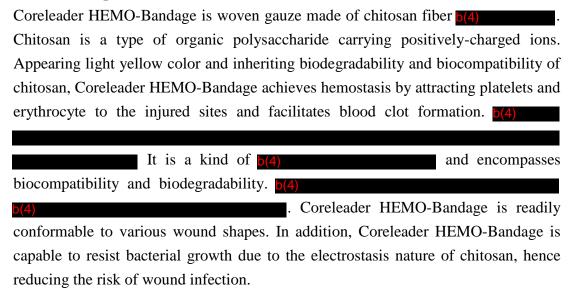
(Not Applicable)

# Chapter 9 Declaration of Conformity and Summery Report (Not applicable)

### Chapter 10 Executive Summery

### **Executive Summary**

### 1. Device description



### 2. Indications for use

Coreleader HEMO-Bandage is intended to be used as a topical dressing to temporarily control moderate to severe external bleeding resulted from traumatic or surgical wounds.

### 3. Mode of Action

Coreleader HEMO-bandage is woven gauze made of chitosan fiber (4) Chitosan is an organic polysaccharide carrying cations (positively charged ions), which attracts negatively charged particles in blood, i.e. erythrocytes, to the wound sites and form strong blood clots. The blood clots aggregating on the open wound result in hemostasis. Chitosan also has antibacterial property, which is found to be antimicrobial for certain bacterial strains. Being manufactured from natural substance, chitosan wound dressing is biocompatible and biodegradable. The features of chitosan mentioned above are widely reported in scientific journal papers.

### b(4)

### 4. Manufacturing Technology

### Ch 10 Executive Summary



12.	CoreLeader HEMO-Bandage is sterilized by gamma-ray radiation in a contracted facility.					
13.	<ol> <li>Base weight</li> <li>Tensile strength test</li> <li>Fluid absorption rate</li> </ol>					

### 5. Non-clinical tests

- 5.1 Sterility: CoreLeader HEMO-Bandage is sterilized to using gamma ray. The sterilization validation tests meet the criteria of AAMI / ANSI / ISO 11137-1, -2: 2006.
- 5.2 Shelf life: The shelf life of CoreLeader HEMO-Bandage is 3 years when the product is stored at room temperature without sun light exposure. The shelf life study used accelerated aging protocols in ASTM F1980-07: Standard Guide for Accelerated Aging of Sterile Barrier Systems for Medical Devices. The results showed that fibrous structure and sterile condition of Coreleader HEMO-bandage are similar to those of fresh product after heated for b(4) Production Process

  These heating durations simulate 1-year, 2-year, and 3-year storage time, respectively.

### 5.3 Biocompatibility:

- **5.3.1 Cytotoxicity:** Coreleader HEMO-bandage passes *in vitro* cytotoxicity test required in AAMI / ANSI / ISO 10993-5:2009: Biological evaluation of medical devices part 5: Test for in vitro cytotoxicity guidelines.
- **5.3.2 Skin irritation test:** Coreleader HEMO-bandage passes *in vivo* rabbit skin irritation test required in AAMI / ANSI / ISO 10993-10: 2010: Biological evaluation of medical devices part 10: Tests for irritation and skin sensitization.
- 5.3.3 Skin sensitization: Coreleader HEMO-bandage passes in vivo guinea pig skin sensitization test required in AAMI / ANSI / ISO 10993-10: 2010: Biological evaluation of medical devices part 10: Tests for irritation and skin sensitization.
- **5.3.4 Acute Systemic toxicity:** Coreleader HEMO-bandage passes *in vivo* acute intraperitoneal and intravenous systemic toxicity test required in

AAMI / ANSI / ISO 10993-11: 2006: Tests for systemic toxicity.

**5.4 Heavy metal test:** Coreleader HEMO-bandage is free of heavy metal contamination, including arsentic, lead, cadmium, copper, and mercury. The detection method is based on Journal of AOAC International, 2006; 89(6): 1447-66.

### **5.5** Performance test:

- **5.5.1 Fluid absorption:** Coreleader HEMO-bandage is fluid absorbent, which is tested according to the protocols in EN 13726-1:2002. The fluid absorbency is > 3 times the product weight.
- **5.5.2 Mechanical strength:** Coreleader HEMO-bandage encompasses the strength due to exclusive weaving techniques. The mechanical tensile modulus of Coreleader HEMO-bandage is > \_\_\_\_\_\_\_ in average.
- 5.5.3 Hemostasis achievement: CoreLeader HEMO-bandage is capable of stop bleeding due to the nature of chitosan. It is proved to achieve arterial hemostasis in swine femoral arterial hemorrhage model. In this in vivo study, the femoral arterial was injured by 6-mm diameter punch wound and has bled for (b) (4) before the application of the product. The initial hemostasis was achieved in about (b) (4) within two pieces of application. The swine survived in (b) (4) after initial hemostasis achievement. This in vivo test backs up the indications of CoreLeader HEMO-Bandage in facilitating hemostasis for traumatic wounds.

### 6. Substantial equivalence

Three predicate devices with 510(k) clearance are proposed to compare with Coreleader HEMO-bandage:

- ◆ QuikClot® Hemostatic Dressing, as known as QuikClot® Combat Gauze (Z-Medica, LLC): K123387
- ◆ HemCon Chitoflex surgical wound dressing (HemCon Medical Technologies, Inc): K080818
- ◆ Celox Gauze PRO/Celox Gauze PRO OTC (Medtrade Product Ltd.): K113560

CoreLeader HEMO-Bandage is substantially equivalence to HemCon Chitoflex, Celox

Gauze, and QuikClot® Combat Gauze for their indications to use, sterility condition, shelf-life, and biocompatibility. Coreleader HEMO-bandage contains chitosan and thus shares the common mode of action with HemCon Chitoflex and Celox Gauze. Chitosan carries positively-charged ions, so does kaolin. In other words, Coreleader HEMO-bandage and Comabat Gauze have similar electrostasis characteristic that attract erythrocytes. For the (b) (4) , HEMO-Bandage is slightly higher than that of Celox Gauze. For the time to achieve hemostasis of femoral arterial injury, HEMO-Bandage is comparable to Combat Gauze.

The substantial equivalences of CoreLeader HEMO-Bandage to the predicate devices are discussed below and listed in Table 2.

Table 2. Substantial equivalence comparison table

Device Name	Coreleader HEMO-bandage	QuikClot® Hemostasis Combat Gauze		Celox Gauze PRO Celox Gauze PRO OTC	
Manufacturer	CoreLeader Biotech Co., Ltd	Z-medica, LLC	HemCon Medical Technologies, Inc.		
FDA approval	Under review for 510(k) clearance	K123387, cleared in 2013	K080818, cleared in 2009	K113560	
Material	Chitosan fiber	1. Kaolin 2. Glycerin USP 3. Gauze	Chitosan-based pliable sponge dressing	Chitosan coated on gauze	
Form	Woven chitosan fabric wound dressing	fabric wound wound dressing		Non-woven chitosan fabric dressing	
Mode of action	1. Chitosan:     chitosan is a     natural     biodegradable     poly-saccharide     characterized by     fluid absorbency     and bacterial     resistance.     Cation on     chitosan attracts     negatively     charged platelets     and erythrocytes     to vessel wound,     and thus	1. Quikclot® Hemostatic Wound dressing is medical gauze coated with kaolin through glycerin USP. Kaolin is a mineral that can trigger blood clot in contact	over the wound	water of blood. Platelets are concentrated, resulting in activation of platelets.  By applying CELOX Gauze PRO surface creates a physical	

	accelerates blood coagulation.  2 (b) (4)  and (b) (4)  with strength and blood absorption when packed in the bleeding wound.	blood through electrostatic interaction.	forming a very tight, coherent seal. In addition to providing hemostasis, HemCon products also offer an antibacterial barrier.	controls blood flow through the dressing to stop bleeding and reduce the risk of re-bleeding.
Intended use	Coreleader HEMO-bandage is intended to be used as a topical dressing to temporarily control moderate to severe bleeding resulted from traumatic or	lacerations and abrasions. It may also be used for temporary	<ol> <li>OTC         indication:         HemCon®         Bandage         OTC is         indicated for         the local         management         of bleeding         such as         laceration and         minor         bleeding.</li> <li>Rx indication:         Hemostatic         dressing for         temporary         control of         severely         bleeding         wounds         intended for         emergency         use.     </li> <li>HemCon         Chitoflex         surgical         wound         dressingalso         controls         bleeding in         patients         following         hemodialysis.</li> </ol>	1. OTC indication:     CELOX Gauze     OTC is indicated     for use as a     temporary topical     dressing for     minor cuts, minor     abrasions, minor     lacerations and     minor burns.  2. RX(prescription)     indication:     CELOX Gauze     PRO is indicated     for minor wound     control, including     control of minor     external bleeding     and exudate from     sutures and/or     surgical     procedures.  Under the     supervision fo     professional     healthcare,     CELOX Gauze     PRO is indicated     for temporary     external     treatment for     controlling     moderate to

							severe bleeding of external wounds.
Exudates absorption	Yes (b) (4) the dry weight of product		Yes		Yes	Yes, about (b) (4) the dry weight of product	
Biodegradable		Yes			Yes	Yes	Yes
Biocompatibility	Non-cytotoxic, I		noi	n-cytotoxic, n-irritating, n-sensitizing	Non-cytotoxic, non-irritating, non-sensitizing	Yes, in compliance with the requirements of BS EN ISO 10993-1	
Hemostasis	Tem	porarily	control	Tei	mporarily	Temporarily	Temporarily control
capacity	moderate to severe bleeding		to	ntrol moderate severe eding	control moderate to severe bleeding	moderate to severe bleeding	
Antimicrobial		Yes		No		Yes	Not reported.
Use		Single	e		Single	Single	Single
Models		cm x	cm <sup>2</sup>	1.	$2" \times 2" = 4$ inch <sup>2</sup> $(5 \text{ cm } \times 5)$	1. 1.5" x 1.5"= 2.25 inch <sup>2</sup> (3.75 cm x 3.75	Only 1 base weight: 250 g/m <sup>2</sup> 1. 1" x 1" = 1 inch <sup>2</sup>
	1	1 7.5 x 675	cm = 25	$cm = 14 cm^2$	(2.54 cm x 2.54		
	$\begin{bmatrix} 2 & 7.5 \text{ x} & 2250 & \text{inch}^2 \\ 300 & & (10 \text{ cm})^2 \end{bmatrix}$	90		2.	2. $4'' \times 4'' = 4$	2. 2" x 2" = 4	$cm = 6.45 cm^2$ )
			2250			$ \begin{array}{ccc} \text{inch}^2 \\ \text{(5 cm x 5cm)} \end{array} $	2. $3$ " x 120" = 360 inch <sup>2</sup>
		cm = 100	$= 25 \text{ cm}^2)$	$(7.62 \text{ cm x } 304.8 \text{ cm} = 2322.6 \text{ cm}^2)$			
	3	400	3000	3.	3. 2" x 12"= 24 inch <sup>2</sup> (5 cm x 30	3. $2'' \times 4'' = 8$ inch <sup>2</sup>	1.
	4	10 x	200			(5  cm x  10  cm =	
		200 108 inch <sup>2</sup>	50 cm <sup>2</sup> )				
	5		2000	4.	108 inch <sup>2</sup>	4. 4" x 4"= 16 inch <sup>2</sup>	
	6	10 x	3000		(7.5  cm x) 365 cm =	$(10 \text{ cm x } 10 \text{ cm} = 100 \text{ cm}^2)$	
		300			$2738 \text{ cm}^2$ )	ŕ	
	7	20 x	4000	5.	4" x 36"=144	5. 4" x 72"=288 inch <sup>2</sup>	
	8	200			inch <sup>2</sup>	(10 cm x 180	
		15 x	3000		(10  cm x) 365  cm =	$cm=1800 cm^2$ )	
		200			$3650 \text{ cm}^2$		
	9	15 x	4500				
		300					
Direction to use	1.	Pack the product		1.	Open package and	1. Open the bandage.	2. Tear open CELOX gauze

wounds with		remove	2.	Ensure that		pack.
firm pressure		Combat		the non-stick	3.	Pack the
until bleeding		Gauze. Keep		side is up.		unraveled
stops. If		the empty	3.	Apply		CELOX gauze
bleeding		package.		directly on		into the wound.
persists and	2.	Pack		•	4.	Apply firm
soaks the		Combat		bleeding.		pressure directly
product, pack in		Gauze into	4.	Apply		to the wound for
another		wound and		pressure until		5 minutes. If any
CoreLeader		use it to		bleeding is		bleeding persists,
Bandage on top		apply		controlled.		apply directly
of the original		pressure	5.	Backing the		pressure for an
one and apply		directly over	٥.	bandage with		additional 5 min.
firm pressure		bleeding		a Kerlix roll	5.	Wrap and tie
until bleeding		source.		or gauze	٠.	CELOX gauze
stops. Do not		(More than		helps ensure		on to the wound
remove the		one Combat		uniform		with elastic
product after		Gauze may		pressure.		bandage so as to
hemostasis.		be required.)		Maintain		maintain the
2. Wrap the	3.	Continue to		pressure on		pressure on
product on	٥.	provide		the bandage		bleeding wounds.
wound with		pressure for		until bleeding	6.	Discard any
sterile gauze to		3 minutes or		is controlled.	•	gauze that has
maintain		until	6.	The bandage		not been used to
pressure on		bleeding	0.	can remain in		pack the wound.
wound.		stops		place for up	7.	Seek Medical
3. Take the patient	4	Wrap and tie		to 48 hours	, •	Care as soon as
to available		bandage to		and should be		possible when
standard		maintain		removed with		dealing with the
medical		pressure.		water or		severely bleeding
treatment as		Seek		saline.		wound.
soon as		medical care				
possible.		immediately				
4. Proper		. Show				
irrigation with		Product				
normal saline is		Removal				
needed when		directions				
removing the		on package				
dressing from		to medical				
wound.		personnel.				
	5.	Product				
		Removal:				
		gently				
		remove				
		gauze from				
		wound, and				
		then				
		thoroughly				
		irrigate the				
	1	wound.	1			

### Chapter 11 Device Description

### 1. General description

CoreLeader HEMO-Bandage (Figure 1) is woven gauze made of chitosan (b) (4)

With the softness and flexibility, it is readily conformable to various wound shapes. Chitosan is a type of organic polysaccharide carrying positively-charged ions. Appearing light yellow color and inheriting biodegradability and biocompatibility of chitosan, CoreLeader HEMO-Bandage achieves hemostasis by attracting platelets and erythrocyte to the injured sites and facilitates blood clot formation. The whole dressing is packed into the bleeding wounds to achieve hemostasis. CoreLeader HEMO-Bandage is sterilized by gamma-ray radiation to after packed in a foil bag.



Figure 1. Appearance of CoreLeader HEMO-Bandage

### 2. Ingredient

CoreLeader HEMO-Bandage is made of (b) (4) fiber and (b) (4)

### 3. Indications for use

CoreLeader HEMO-Bandage is intended to be used as a topical dressing to temporarily control moderate to severe external bleeding resulted from traumatic or surgical wounds.

### 4. Contraindications

CoreLeader HEMO-Bandage should not be used on patients who are allergic to crustacean animals. It should not be used as a surgical implantation.

### 5. Mode of action

Chitosan: chitosan is an organic polysaccharide carrying cations (positively charged ions), which attracts negatively charged particles in blood, i.e. platelets and erythrocytes, to the wound sites and form strong blood clots. The blood clots aggregating on the open

wound result in hemostasis. This mechanism enables chitosan wound dressing to stop hemorrhage and to be used as a temporal treatment for severely bleeding wounds. Chitosan is able to absorb fluid greater than its weight, and thus can be used as an absorbent wound dressing to manage bloods and exudates. Chitosan further has antibacterial property, which is found to be antimicrobial for certain strains. Being manufactured from natural substance, chitosan wound dressing is biocompatible and biodegradable. The features of chitosan mentioned above are widely reported in scientific journal papers.<sup>1-4</sup>

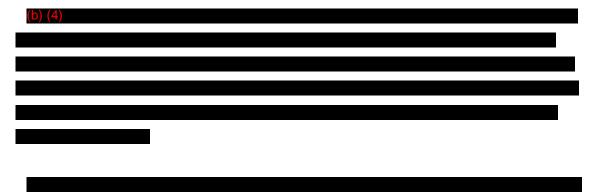
(b) (4)

### 6. Risk Analysis

Risk analysis is performed to clarify the safety level of CoreLeader HEMO-Bandage, before design master file creation and product massive manufacturing. Determination of the suitable use of a medical device is related to the risk acceptability, which takes into account the intended use, performance, risks and benefits associated with the clinical practice. This risk analysis is executed by the R&D Department of CoreLeader Biotech Co., Ltd in compliance to ISO14971:2007.

The risk analysis report is listed as Annex 1in the submission.

### 7. Manufacturing Technology

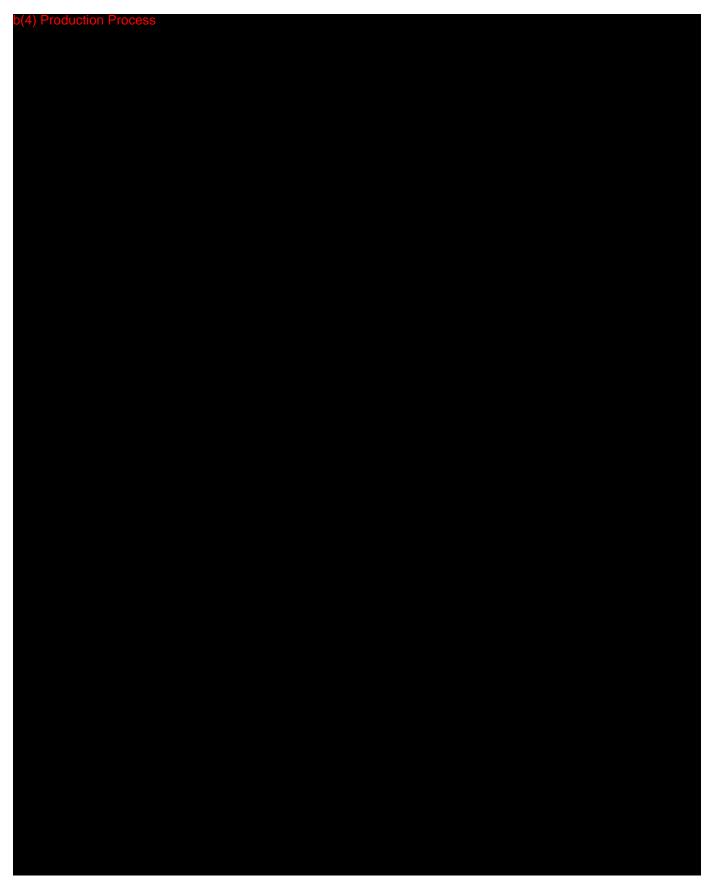




Chapter 11. Device description



Chapter 11. Device description



### 7. Principle of operation

CoreLeader HEMO-Bandage is constituted with chitosan (4) Production homogenously, and thus any part of it can contact with wound. CoreLeader HEMO-Bandage is for topical use only. To obtain the most optimal efficacy, CoreLeader HEMO-Bandage should be directly pressed against the bleeding wounds. CoreLeader HEMO-Bandage has various sizes to fit in different wound area. If needed, CoreLeader HEMO-Bandage should be packed into bleeding wounds to promote hemostasis. CoreLeader HEMO-Bandage with larger size is capable to absorb more exudates and blood, attracting more erythrocyte and platelets to achieve hemostasis. Therefore, with the severity of bleeding, CoreLeader HEMO-Bandage with broader area should be applied or more than one CoreLeader HEMO-Bandage as needed. In 24 hours, CoreLeader HEMO-Bandage should be removed from the wound and replaced with a fresh one. While replacing or removing the wound dressing, wound should be irrigated with normal saline solution.

### References

- 1. Gustafson SB, Fulkerson P, Bildfell R, et al. Chitosan dressing provides hemostasis in swine femoral arterial injury model. *Prehosp Emerg Care* 2007;11:172-8.
- 2. Wedmore I, McManus JG, Pusateri AE, et al. A special report on the chitosan-based hemostatic dressing: experience in current combat operations. *J Trauma* 2006;60:655-8.
- 3. Xie H, Khajanchee YS, Shaffer BS. Chitosan hemostatic dressing for renal parenchymal wound sealing in a porcine model: implications for laparoscopic partial nephrectomy technique. *JSLS* 2008;12:18-24.
- 4. Xie H, Khajanchee YS, Teach JS, et al. Use of a chitosan-based hemostatic dressing in laparoscopic partial nephrectomy. *J Biomed Mater Res B Appl Biomater* 2008;85:267-71.

### Chapter 12 Substantial Equivalence Discussion

### **Substantial Equivalence**

The safety and efficacy of CoreLeader HEMO-Bandage wound dressing are similar to the following predicate devices:

- ♦ HemCon Chitoflex surgical wound dressing (HemCon Medical Technologies, Inc): K080818
- ◆ QuikClot® Hemostatic Dressing, as known as QuikClot® Combat Gauze (Z-Medica, LLC): K123387
- ◆ Celox Gauze PRO/Celox Gauze PRO OTC (Medtrade Product Ltd.): K113560

The substantial equivalences of CoreLeader HEMO-Bandage to the predicate devices are discussed below and listed in Table 1.

l.	b(4)
2.	b(4)

<b>3</b> .	b(4) b(4)	
4.	b(4)	
5.	b(4)	
6	b(4) .	
υ.	b(4)	
7.	b(4)	

	b(4)	
	·	
_		
8.	b(4)	

9. b(4)

9.1 <mark>b(4)</mark>	
<b>10.</b> b(4)	
Please refer to Ch 19 for detail explanation.	
(4)	

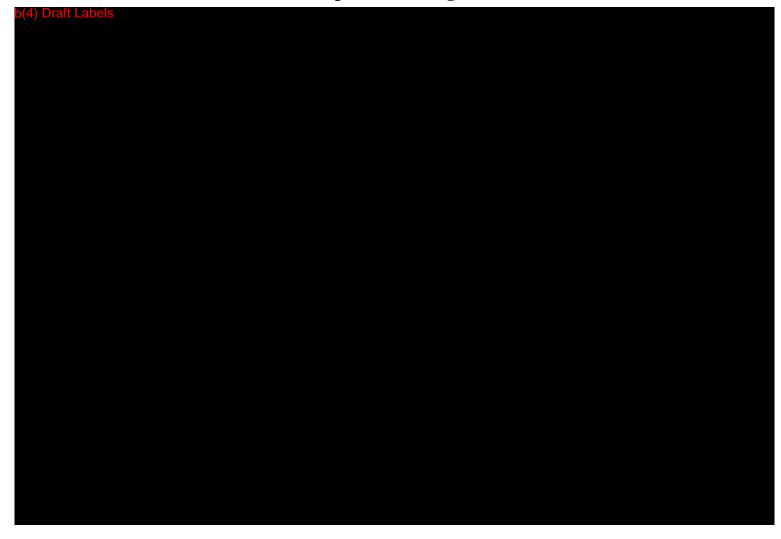
 $Table\ 1.\ Comparison\ of\ ``CoreLeader"'\ HEMO-Bandage\ with\ predicate\ devices.$ 

Device Name	CoreLeader HEMO-Bandage	QuikClot® Hemostasis Combat Gauze	HemCon® Chitoflex surgical dressing	Celox Gauze PRO
Manufacturer	CoreLeader Biotech Co., Ltd	Z-medica, LLC	HemCon Medical Technologies, Inc.	Medtrade Product Ltd.
FDA approval	Under review for 510(k) clearance	K123387, cleared in 2013	K080818, cleared in 2009	K113560
Material	<ol> <li>Chitosan fiber</li> <li>Rayon fiber</li> </ol>	1. Kaolin 2. Glycerin USP 3. Gauze	Chitosan-based dressing	Chitosan
Form	Woven chitosan fabric wound dressing	Gauze-like wound dressing	Sheet-like wound dressing	Non-woven chitosan fabric dressing
	natural biodegradable poly-saccharide characterized by fluid absorbency and bacterial resistance. Cation on chitosan attracts negatively charged platelets and erythrocytes to vessel wound, and thus accelerates blood coagulation.  2. Rayon: rayon is plant cellulose characterized by tensile resistance and fluid absorbency. Rayon provides wound dressing with strength and blood absorption when packed in the bleeding wound.	Hemostatic Wound dressing is medical gauze coated with kaolin through glycerin USP.  2. Kaolin is a mineral that can trigger blood clot in contact blood through electrostatic interaction.	chitosan. Because chitosan has a positive charge, it attracts red blood cells, which have a negative charge. The red blood cells create a seal over the wound as they are drawn into the bandage, forming a very tight, coherent seal. In addition to providing hemostasis, HemCon products also offer an antibacterial barrier.	consists of a chitosan hemostatic granules adhered to a non-woven gauze. The product absorbs water of blood. Platelets are concentrated, resulting in activation of platelets.  By applying CELOX Gauze PRO surface creates a physical barrier which controls blood flow through the dressing to stop bleeding and reduce the risk of re-bleeding.
Intended use	CoreLeader HEMO-Bandage is	QuikClot® Combat	1. OTC indication:	1. OTC indication:
	HEMO-Bandage is intended to be used as a topical dressing to temporarily control moderate to severe external bleeding resulted from traumatic or surgical wounds.	dressing for local management of bleeding wounds such as cuts,	HemCon® Bandage OTC is indicated for the local management of bleeding such as laceration and minor bleeding.  2. Rx indication: Hemostatic	CELOX Gauze OTC is indicated for use as a temporary topical dressing for minor cuts, minor abrasions, minor lacerations and minor burns.

		of severely bleeding wounds such as surgical wounds (operative, postoperative, dermatological, etc.) and traumatic injuries.	dressing for temporary control of severely bleeding wounds intended for emergency use.  3. HemCon Chitoflex surgical wound dressingalso controls bleeding in patients following hemodialysis.	2. RX(prescription) indication:     CELOX Gauze     PRO is indicated for minor wound control, including control of minor external bleeding and exudate from sutures and/or surgical procedures.  Under the supervision of professional healthcare, CELOX Gauze PRO is indicated for temporary external treatment for controlling moderate to severe bleeding of external wounds.	
b(4) b(4)	Yes, about times the product dry weight	b(4	b(4	Yes, <b>b(4)</b>	
Biodegradable	Yes	Yes	Yes	Yes	
Biocompatibility	ISO-10993-1	Fulfill ISO 10993-1	Fulfill ISO 10993-1	Fulfill ISO 10993-1	
Hemostasis capacity	5-min compression using 2 applications of dressings (14g, 10 cm x 150 cm) on <i>in vivo</i> 45-sec free bleeding of 6-mm punch injury of femoral arterial of swine model.	application of dressings on <i>in vivo</i> 45-sec free bleeding of 6-mm punch injury of femoral arterial of swine model.[1]	applications of dressings on <i>in vivo</i> 45-sec free bleeding of 6-mm punch injury of femoral arterial of swine model.[2]	50% survival rate resulted from one time of 3-min compression using 1 application of dressing (Celox trauma gauze, 19.5g, 7.5 cm x 183 cm) on <i>in vivo</i> 45-sec free bleeding of 6-mm punch injury of femoral arterial of swine model.[3]	
Use	Single	Single	Single	Single	
Models	cm x cm     cm²       1     7.5 x 90     675       2     7.5 x     2250	1. 2" x 2"= 4 inch <sup>2</sup> (5 cm x 5 cm = 25 cm <sup>2</sup> ) 2. 4" x 4"= 4 inch <sup>2</sup>	1. 1.5" x 1.5"= 2.25 inch <sup>2</sup> (3.75 cm x 3.75 cm = 14 cm <sup>2</sup> )	Only 1 base weight: 250 g/m <sup>2</sup> 1. 1" x 1" = 1 inch <sup>2</sup> (2.54 cm x 2.54	

		300			(10  cm x  10  cm =				$cm = 6.45 cm^2$ )
	3	7.5 x	3000		$100 \text{ cm}^2$ )	2.	$2'' \times 2'' = 4 \operatorname{inch}^2$		
	3		3000	3.	$2" \times 12" = 24$		` <u> </u>	2.	3" x 120" = 360
		400			$inch^2$ (5 cm x 30 cm =		cm <sup>2</sup> )		inch <sup>2</sup> (7.62 cm x 304.8
	4	10 x 20	200		$(5 \text{ cm } \times 50 \text{ cm} = 150 \text{ cm}^2)$	3.	$2'' \times 4'' = 8 \operatorname{inch}^2$		$cm = 2322.6 \text{ cm}^2$
	5	10 x 200	2000	4.	3" x 36"= 108		5  cm x  10  cm = 50		cm= 2322.0 cm )
	6	10 x 300	3000		inch <sup>2</sup>		cm <sup>2</sup> )		
	7	20 x 200	4000		$(7.5 \text{ cm x } 365 \text{ cm} = 2738 \text{ cm}^2)$		4" x 4"= 16 inch <sup>2</sup>		
	<u> </u>			5.	4" x 36"=144	ı	10 cm x 10 cm=100		
	8	15 x 200	3000		inch <sup>2</sup>	,	em <sup>2</sup> )		
	9	15 x 300	4500		(10 cm x 365 cm	_	4m 70m 200 : 12		
					$= 3650 \text{ cm}^2$ )	5.			
							$10 \text{ cm x } 180 \text{ cm} = 1800 \text{ cm}^2$		
Direction to use	1 '	Pack CoreL	ander	1.	Pack Combat	1.		1.	Tear open
Direction to use		HEMO-Ban		1.	Gauze into	2.	Ensure that the	1.	CELOX gauze
		wounds with	•		wound and use it		non-stick side is		pack.
		pressure unt			to apply pressure		up.	2.	Pack the
	1	bleeding sto	ps. If		directly over	3.	Apply directly on		unraveled
	1	bleeding per	rsists and		bleeding source.		the source of		CELOX gauze
		soaks the pr			(More than one		bleeding.		into the wound.
		pack in anot			Combat Gauze	4.	Apply pressure	3.	Apply firm
		CoreLeader	_	_	may be required.)		until bleeding is		pressure directly
		on top of the	-	2.	Continue to	_	controlled.		to the wound for
		one and app pressure unt			provide pressure for 3 minutes or	5.	Backing the bandage with a		5 minutes. If any bleeding persists,
		bleeding sto			until bleeding		Kerlix roll or		apply directly
		not remove	_		stops		gauze helps ensure		pressure for an
		product afte		3.	Wrap and tie		uniform pressure.		additional 5 min.
		hemostasis.			bandage to		•	4.	Wrap and tie
	2.	Wrap CoreL	Leader		maintain		on the bandage		CELOX gauze on
		HEMO-Ban	_		pressure. Seek		until bleeding is		to the wound with
		wound with			medical care		controlled.		elastic bandage so
		gauze to ma			•	6.	The bandage can		as to maintain the
		pressure on			Show empty		remain in place for		pressure on
		Take the pat available sta			package to medical		up to 48 hours and should be removed	5	bleeding wounds. Discard any
		avanabie sta medical trea			personnel.		with water or	٦.	gauze that has not
		soon as poss		4.	Gently remove		saline.		been used to pack
		Proper irriga			gauze from				the wound.
		normal salir			wound, and then			6.	Seek Medical
	1	needed whe	n		thoroughly				Care as soon as
		removing th			irrigate the				possible when
	•	dressing fro	m wound.		wound.				dealing with the
									severely bleeding
									wound.

### **Proposed Labeling**



Chapter 13 Proposed Labeling

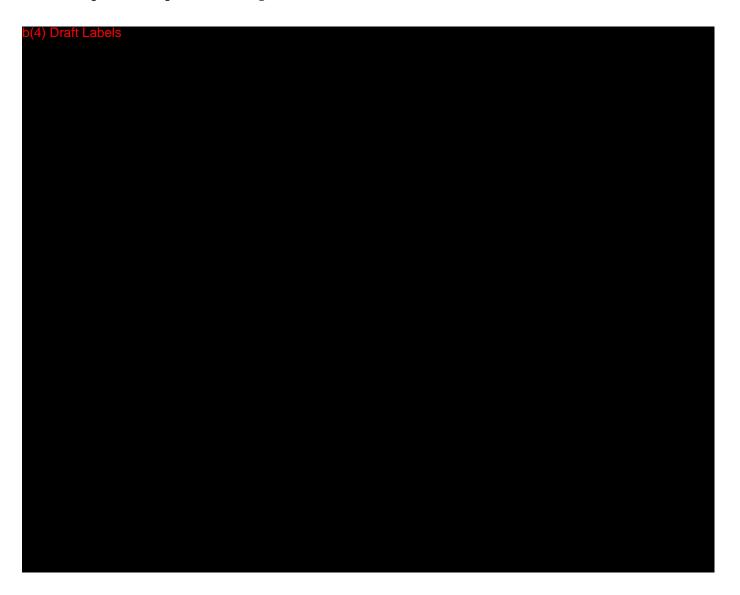


Table 1. The meaning of symbols used in labeling

SYMBOL	MEANING	USAGE	EXAMPLE
2	DO NOT REUSE	_	_
$\square$	USE BY	Shall be accompanied by the date expressed as four digits for the year and two digits for the month	ex. 21996-06
LOT	BATCH CODE	The batch code shall be adjacent to the symbol. The relative size and location of the symbol and the batch code are not specified.	ех. от 061234
STERILE R	STERILIZATION USING IRRADIATION	Refer EN556	_
***	MANUFACTURER		_
[]i	CONSULT INSTRUCTION FOR USE	_	_

### 3. Package insert

### 1. <u>Description</u>

CoreLeader HEMO-Bandage is woven gauze made of chitosan and 5(4) Chitosan is organic polysaccharide carrying positively-charged ions which facilitates blood clot formation through electrostasis property. With the softness and flexibility, it is readily conformable to various wound shapes.

### 2. Effective Material

Chitosan b(4)

### 3. Indications for use

CoreLeader HEMO-Bandage is intended to be used as a topical dressing to temporarily control moderate to severe external bleeding resulted from traumatic or surgical wounds.

### 4. Biocompatibility

CoreLeader HEMO-Bandage passes the tests of cytotoxicity, skin irritation and skin sensitization.

- **5.** <u>Sterility</u>: CoreLeader HEMO-Bandage is sterilized by gamma radiation to reach 10<sup>-6</sup> SAL.
- **6. Shelf life:** 3 years

### 7. Directions for Use

- [1] Pack CoreLeader HEMO-Bandage into wounds with firm pressure until bleeding stops. If bleeding persists and soaks the product, pack in another CoreLeader Bandage on top of the original one and apply firm pressure until bleeding stops. Do not remove the product after hemostasis.
- [2] Wrap CoreLeader HEMO-Bandage on wound with sterile gauze to maintain pressure on wound.
- [3] Take the patient to receive standard medical treatment as soon as possible.
- [4] Proper irrigation with normal saline is needed when removing the dressing from wound.

### 8. Storage

The product should be stored at room temperature without sun light exposure.

### 9. Contraindications

- [1] CoreLeader HEMO-Bandage should not be used on patients who are allergic to crustacean animals.
- [2] CoreLeader HEMO-Bandage should not be used as a surgical implantation.

### 10. Warnings and precautions

- [1] The product is for single use only. Re-use may cause contamination and weak performance.
- [2] The product is sterilized and should not be re-sterilized.
- [3] Do not use the product if the package is not intact.
- [4] Do not use the product beyond the expiration date.

### 11. Models.

Model	cm x cm	
CF-W075090	7.5 x 90	
CF-W075300	7.5 x 300	
CF-W075400	7.5 x 400	
CF-W100020	10 x 20	
CF-W100200	10 x 200	
CF-W100300	10 x 300	
CF-W200200	20 x 200	
CF-W150200	15 x 200	
CF-W150300	15 x 300	

### Manufacturer: CoreLeader Biotech Co., Ltd.

19F., No.100, Sec. 1, Xintai 5<sup>th</sup> Rd., Xizhi Dist., New Taipei city 221, Taiwan (R.O.C)

Tel: +886-2-2696-8880 Fax: +886-2-2696-8882

Website: www.CoreLeaderbio.com



Issue date: 2015/03/30

Rev.: 1.0

### Chapter 14 Sterilization and Shelf Life

#### **Sterilization and Shelf Life**

**1. Sterility:** HEMO-Bandage is homogenous woven bandage packed in a foil bag before gamma sterilization.

CoreLeader HEMO-bandage is sterilized to 10<sup>-6</sup> SAL using gamma ray with a dose no less than 27.3 kGy. The sterilization validation tests meet the criteria of AAMI / ANSI / ISO 11137-1, -2: 2006: Sterilization of health care product radiation – Part 1: Requirements for development, validation and routine control of a sterilization process for medical devices; Part 2: Establishing the sterilization dose.

The test report is listed as Annex 3.

2. Shelf life: The shelf life of CoreLeader HEMO-bandage is 3 years when the product is stored at room temperature without sun light exposure. The shelf life study used accelerated aging protocols in ASTM F1980-07: Standard Guide for Accelerated Aging of Sterile Barrier Systems for Medical Devices. The results showed that fibrous structure and sterile condition of CoreLeader HEMO-bandage are similar to those of fresh product after heated for 11, 23, and 34 days at 75°C. These heating durations simulate 1-year, 2-year, and 3-year storage time, respectively.

The test report is listed as Annex 4.

## Chapter 15 Biocompatibility

#### **Biocompatibility**

#### 1. Patient-contacting components:

CoreLeader HEMO-bandage is uniformly made of chitosan fiber and rayon fiber. The whole dressing can directly contact the bleeding wounds.

#### 2. Contact classification:

CoreLeader HEMO-bandage should not stay on wounds for longer than 24 hours.

**3. Biocompatibility:** CoreLeader HEMO-bandage passes the biocompatibility tests in accordance with ISO 10993-1.

#### 3.1 Cytotoxicity:

According to ISO 10993-5, the pass/fail criteria are as follows:

- ◆ Cell viability ≥ 75%
- ◆ Cell morphology grade ≤ 2

CoreLeader HEMO-bandage passes *in vitro* cytotoxicity test required in AAMI / ANSI / ISO 10993-5:2009.

The test report is listed as Annex 5.

For cytotoxicity testing, culture medium with serum was used as vehicle for extraction. At the start of the extraction, the solution appeared clear and free of particulates. After 24 h extraction with constant agitation, the test article medium extract appeared the same original state of the vehicle, clear and free of particulates.

#### 3.2 Skin irritation:

According to ISO 10993-10, the pass/fail criteria are as follows:

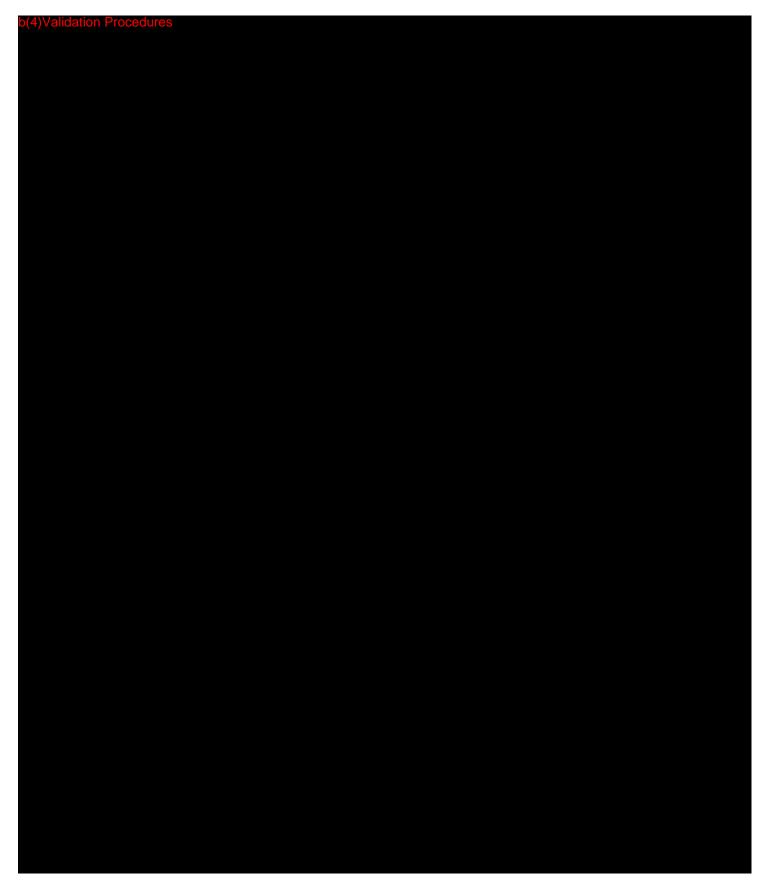
- No skin reactions or death in the treatment and corresponding control groups
- ◆ The PII values for the tested groups range from 0 to 0.4.

CoreLeader HEMO-bandage passes *in vivo* rabbit skin irritation test required in AAMI / ANSI / ISO 10993-10: 2010.

The test report is listed as Annex 6.

#### 3.3 Skin sensitization:

According to ISO 10993-10, the pass/fail criteria are as follows:



All the extracts were used immediately and directly without any adjustments. For sensitization testing, extracts were maintained at room temperature during extracts-adjuvant preparation, and used within 2 h of preparation.

#### 3.4 Acute intravenous/intraperitoneal systemic toxicity:

According to ISO 10993-11, the pass/fail criteria are as follows:

- Clinical observation: no abnormal clinical signs were observed in both control and treated mice.
- Mortality: None of the animals in either the control or treatment group died.
- ◆ Body weight: No body weight loss > 10% was observed in either the control or treatment group.
- ◆ Gross observation: No gross lesions were found in the either the control or treatment group.

CoreLeader HEMO-bandage passes acute intravenous systemic toxicity test required in AAMI / ANSI / ISO 10993-11: 2006.

The test report is listed as Annex 8 (intravenous) and Annex 9 (intraperitoneal).

#### 3.5 Endotoxin test:

The pass/fail criteria is < 0.5 EU/ml

The endotoxin level of CoreLeader HEMO-bandage is **b(4)** in the study following USP <85> "Bacterial Endotoxin Test".

The test report is listed as Annex 10.

#### 3.6 Heavy metal test:

The pass/fail criteria are as follows,

- ◆ Lead (pb) **b**(4)
- ◆ Cadmium (Cd)<mark>b(4)</mark>
- ◆ Mercury (Hg) b(4)
- lack Copper (Cu) b(4)
- ♦ Arsenic (As)<mark>b(4)</mark>

CoreLeader HEMO-Bandage passes the heavy metal content tests, which proves

that HEMO-Bandage is free of heavy metal contamination, including arsentic, lead, cadmium, copper, and mercury. The testing protocol follows the guidance of detection instrument, Inductively Coupled Plasma-Mass Spectrometer (ICP-MS).

The test report is listed as Annex 11.

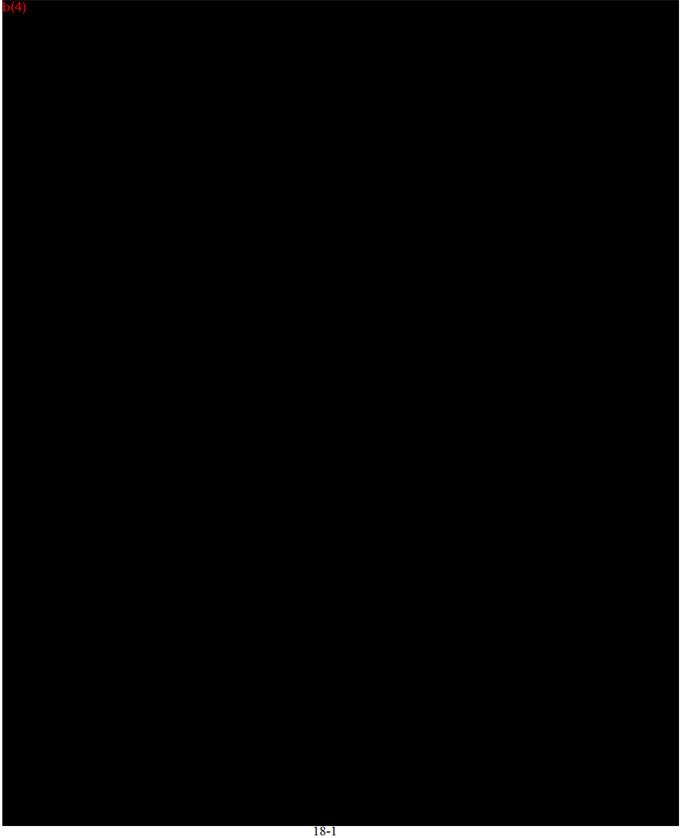
### Chapter 16 Software

(Not applicable)

# Chapter 17 Electromagnetic Compatibility and Electrical Safety (Not Applicable)

## Chapter 18 Performance Testing-Bench

#### **Performance Testing-Bench**



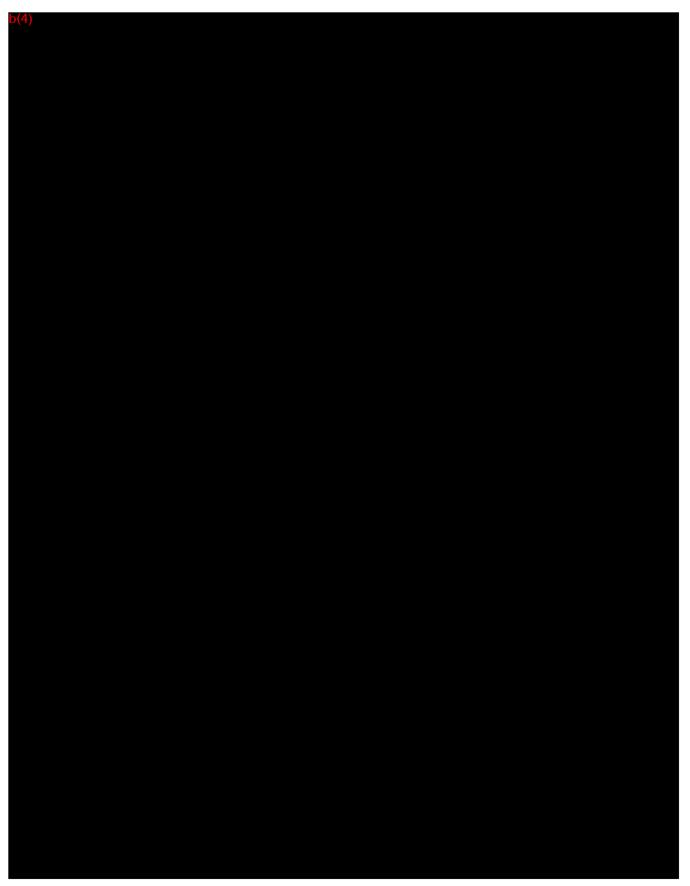
Chapter 18 Performance Testing-Bench



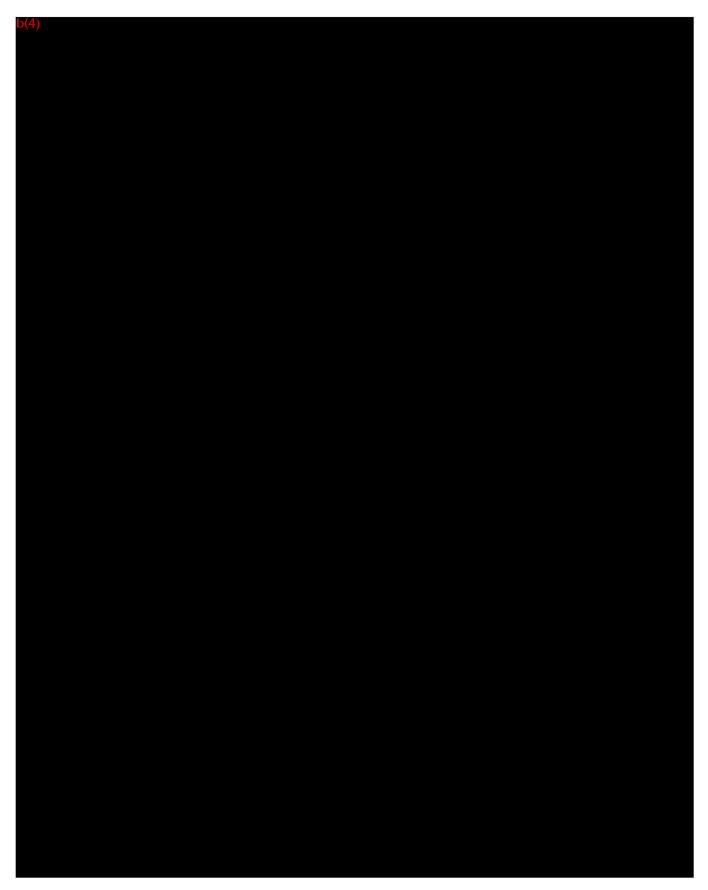
#### Chapter 19

Performance Testing - Animal

Chapter 19 Performance Testing – Animal



Chapter 19 Performance Testing – Animal



Chapter 19 Performance Testing – Animal



Chapter 19 Performance Testing – Animal



#### Chapter 20

## Performance Testing-Clinical (Not Applicable)

#### CORELEADER BIOTECH CO., LTD RISK MANAGEMENT REPORT (Comply with ISO 14971:2007)

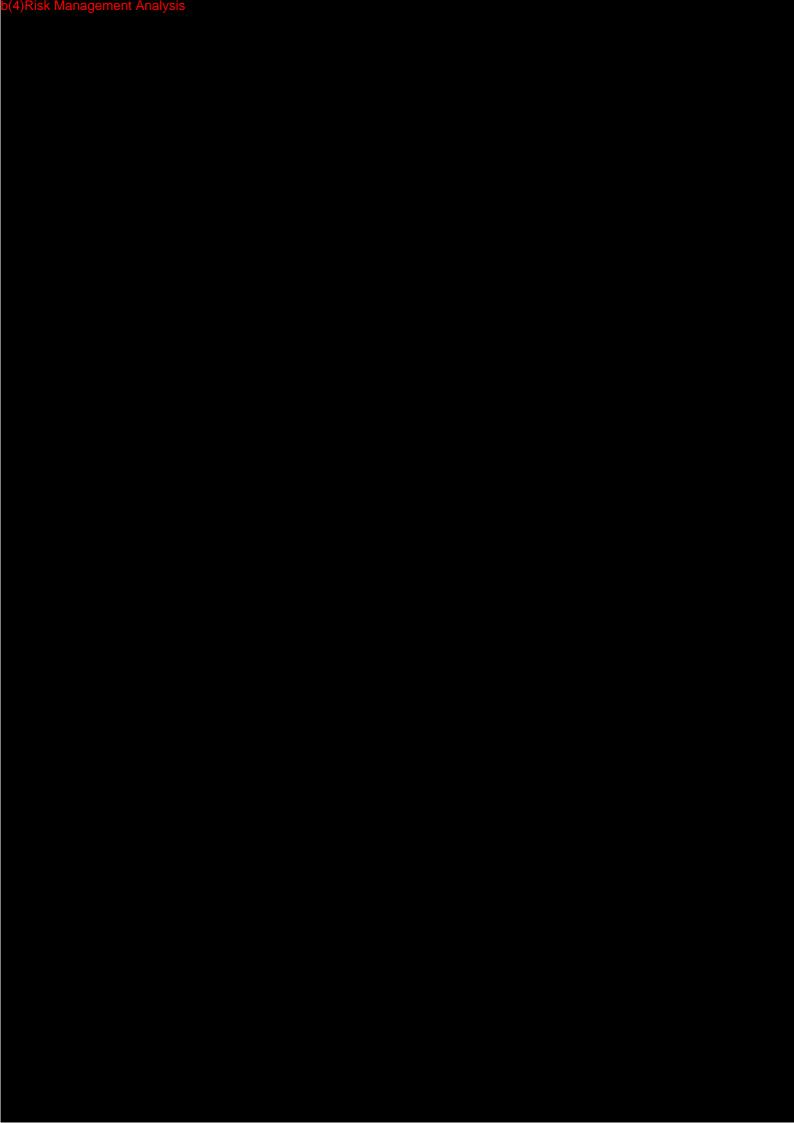
### **HEMO-Bandage**

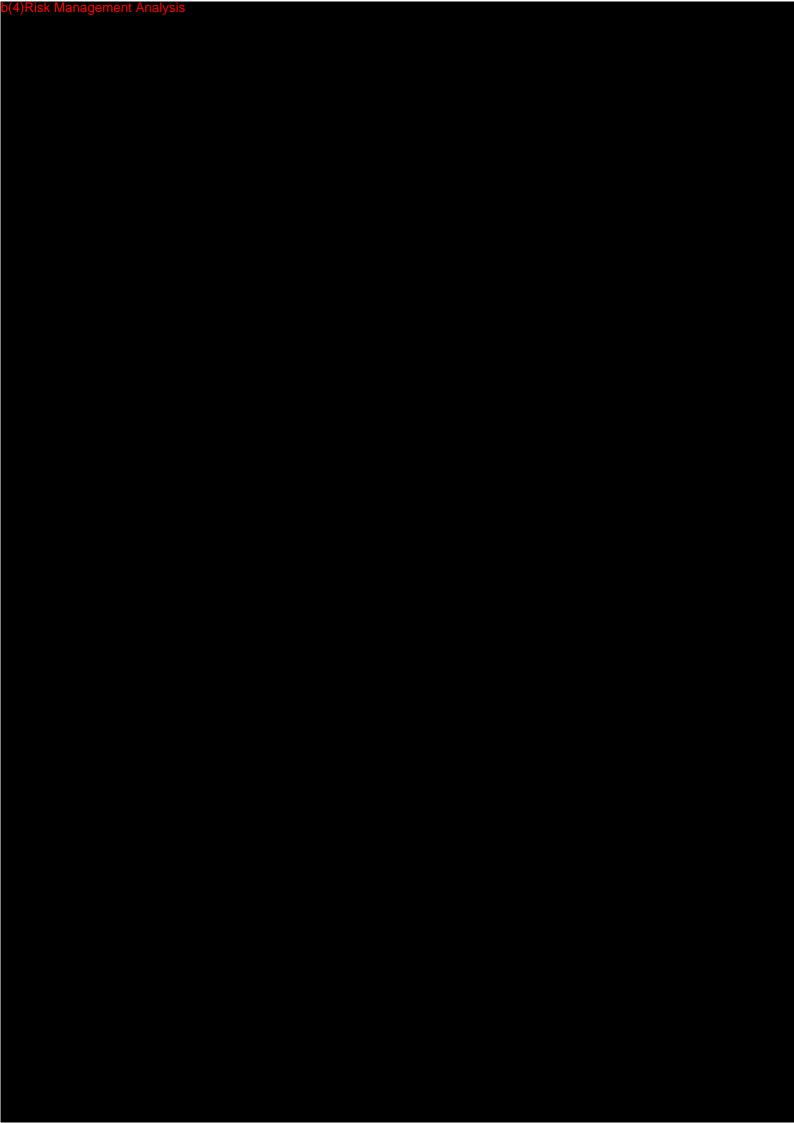


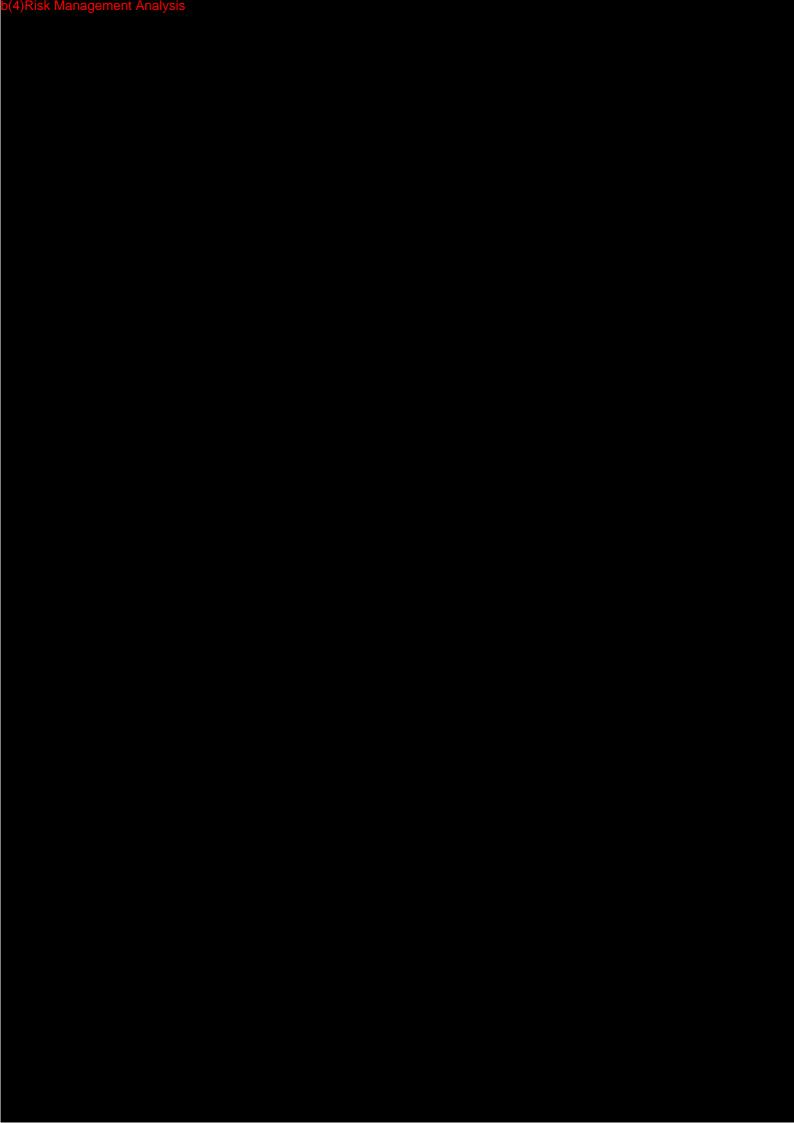
Initial Prepare By:	Review By:	Approve By:
b) (6)	Ya-Wen Kuo	Ya-Wen Kuo
Vi-How Lin	Ya-Wen Kuo	Ya-Wen Kno
Date: 2014/12/25	Date:2014/12/26	Date:2014/12/26
Position: Manager, System	Position: Manager, R&D and	Position: Manager, R&D and
Compliance	Regulatory Affair	Regulatory Affair

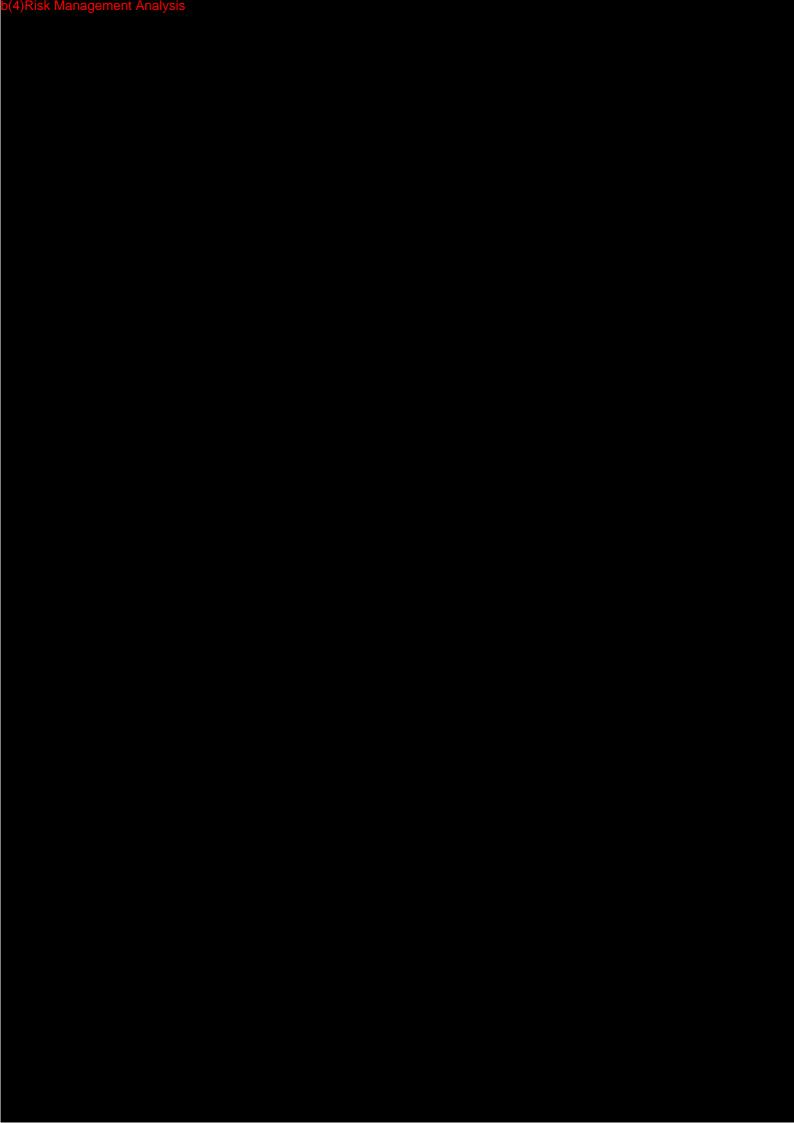
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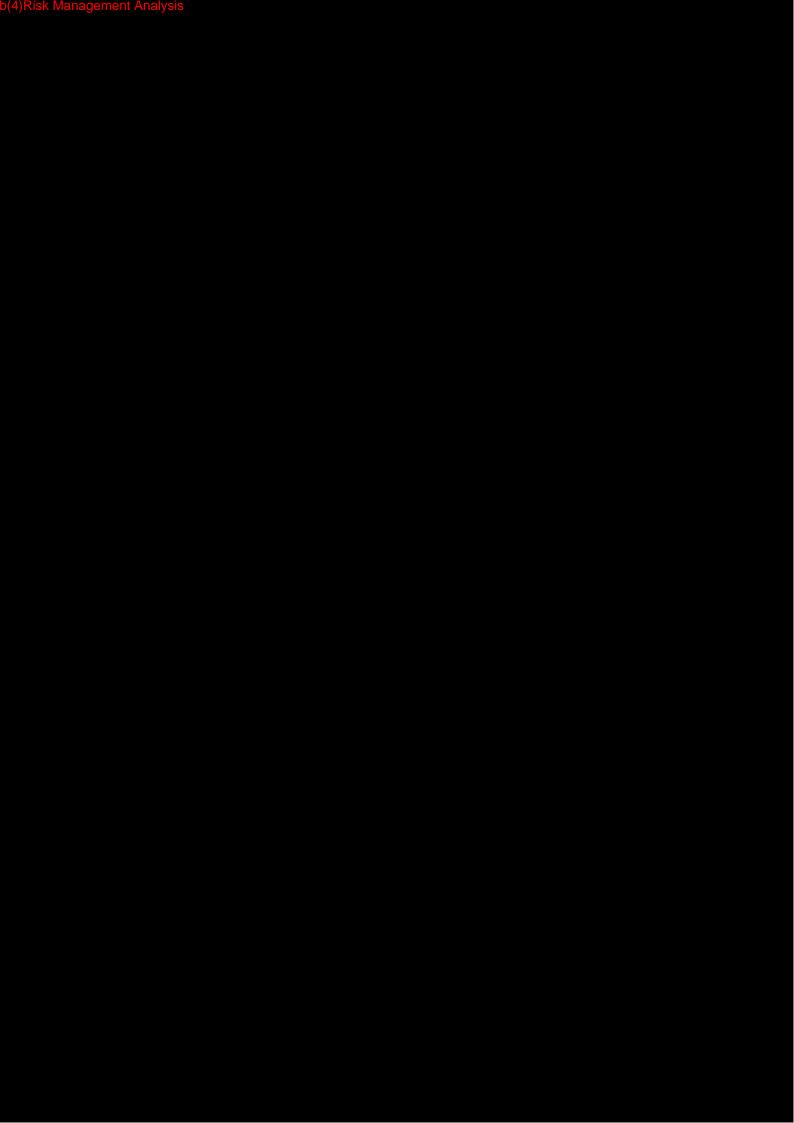
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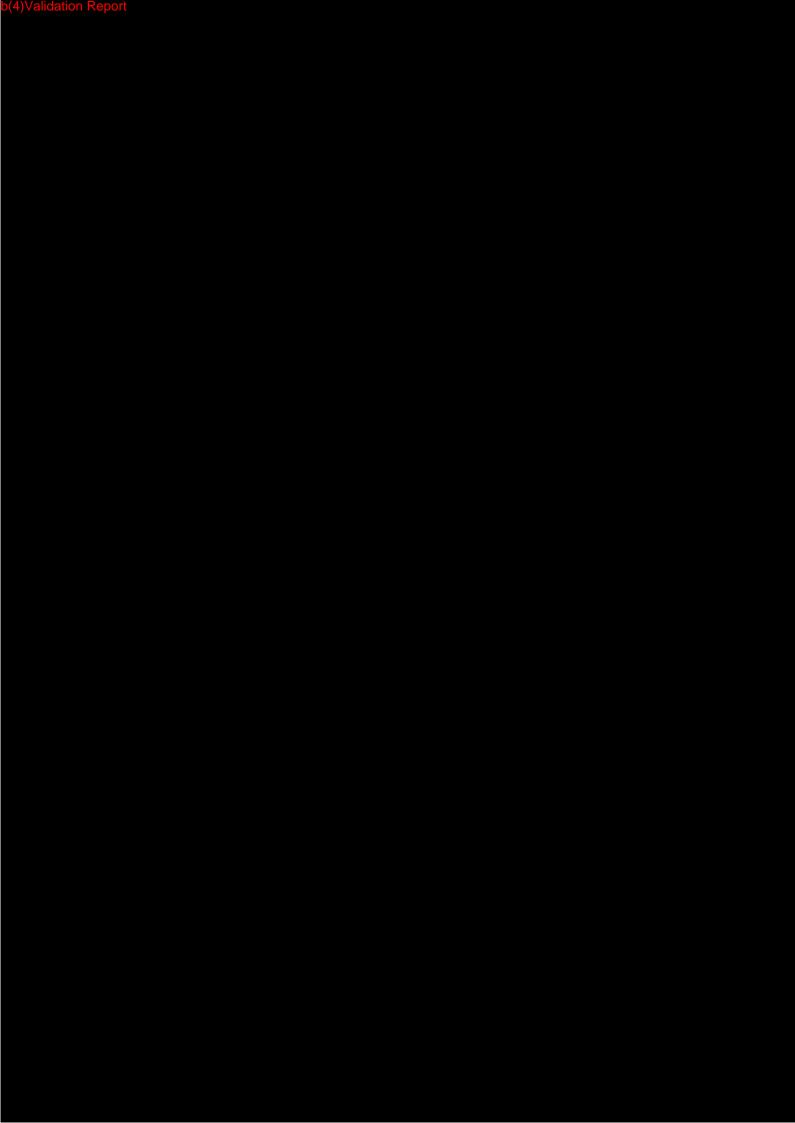


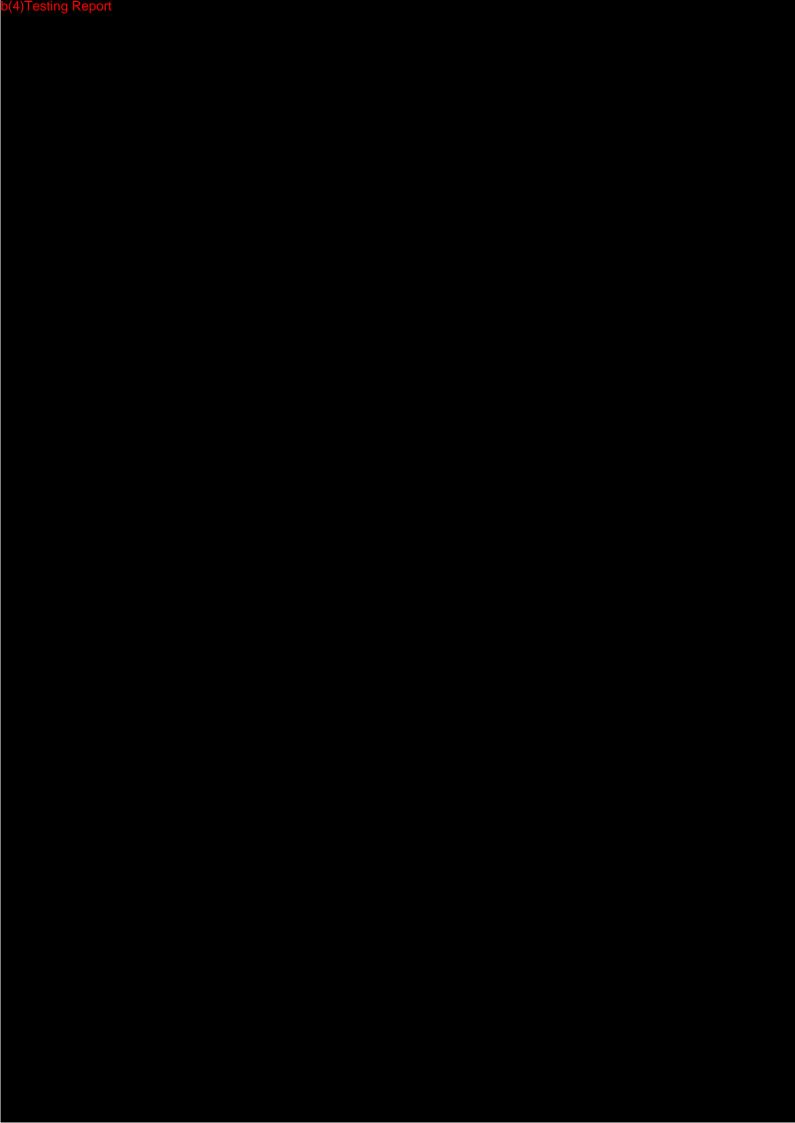


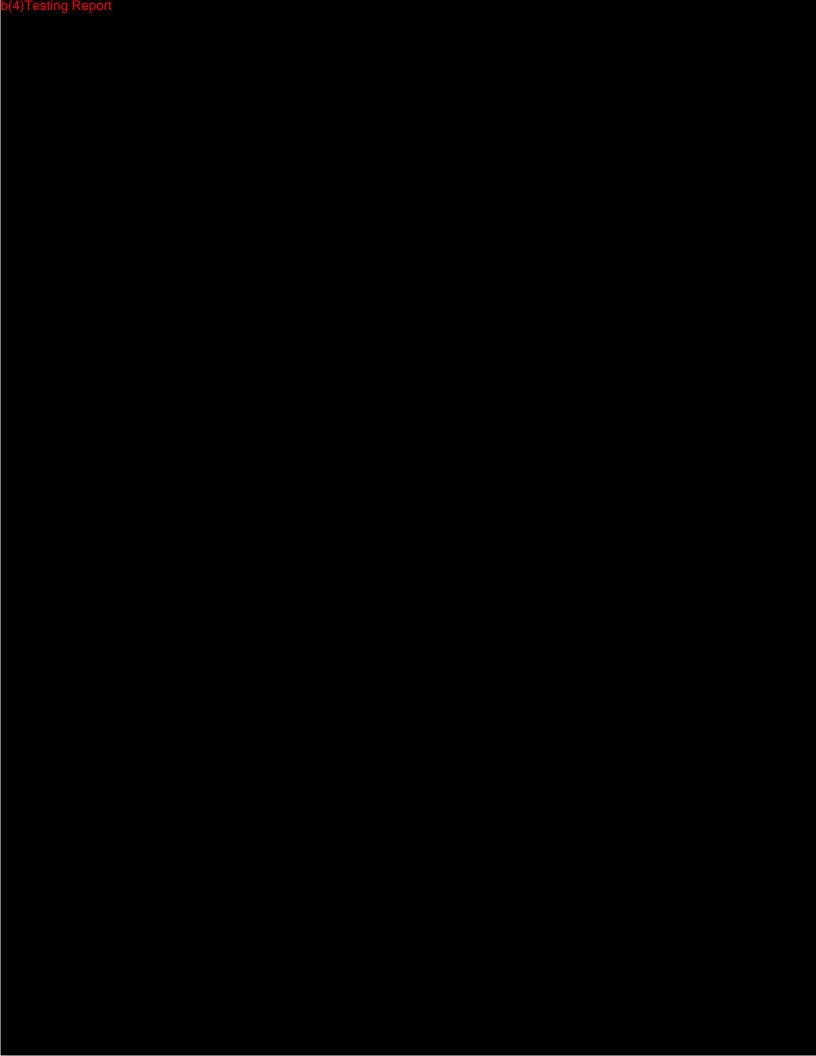


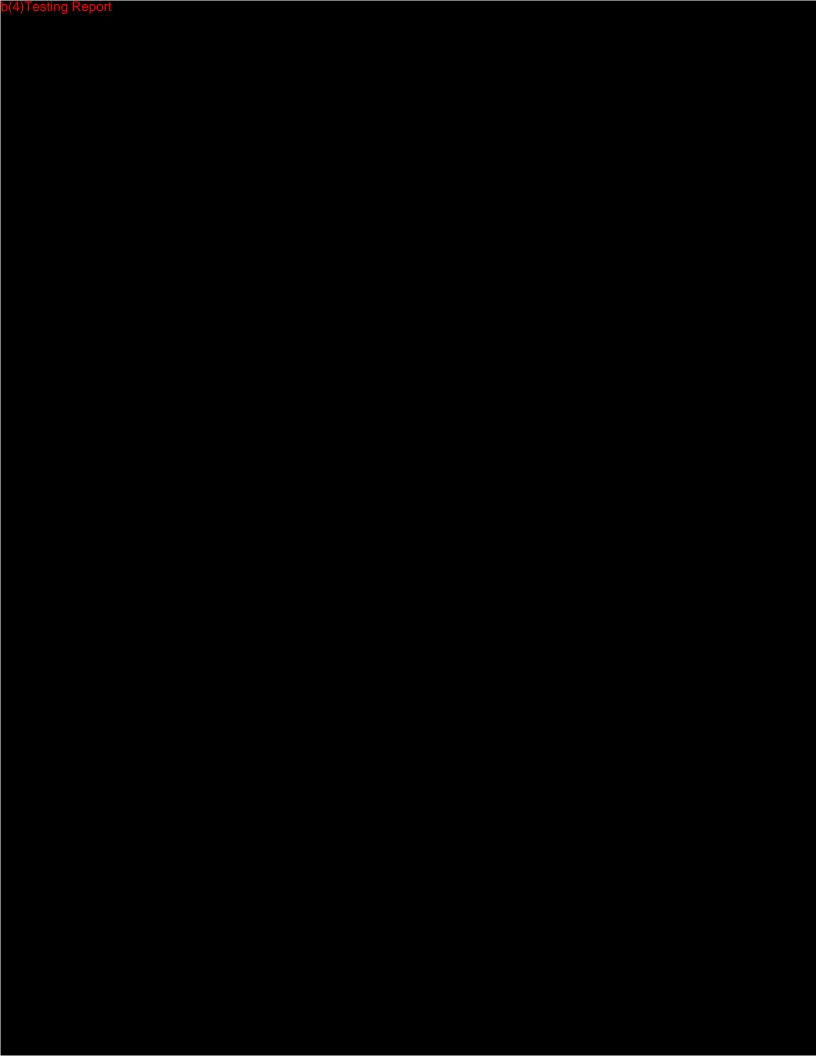


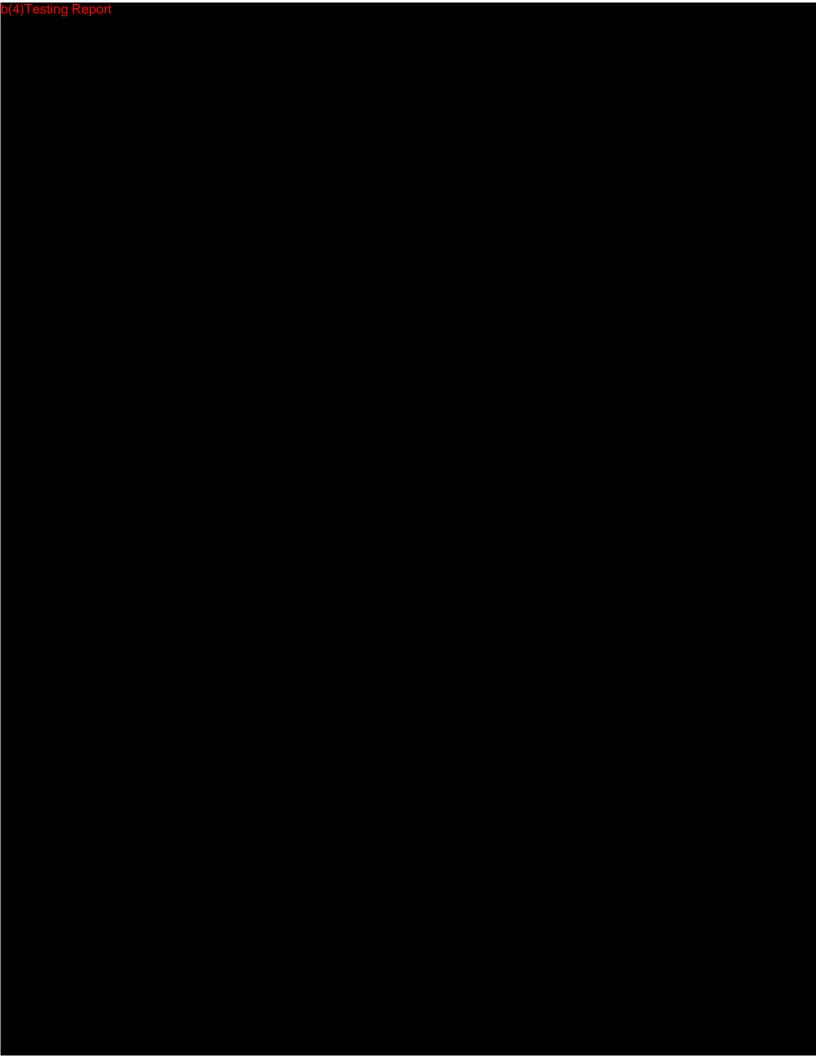


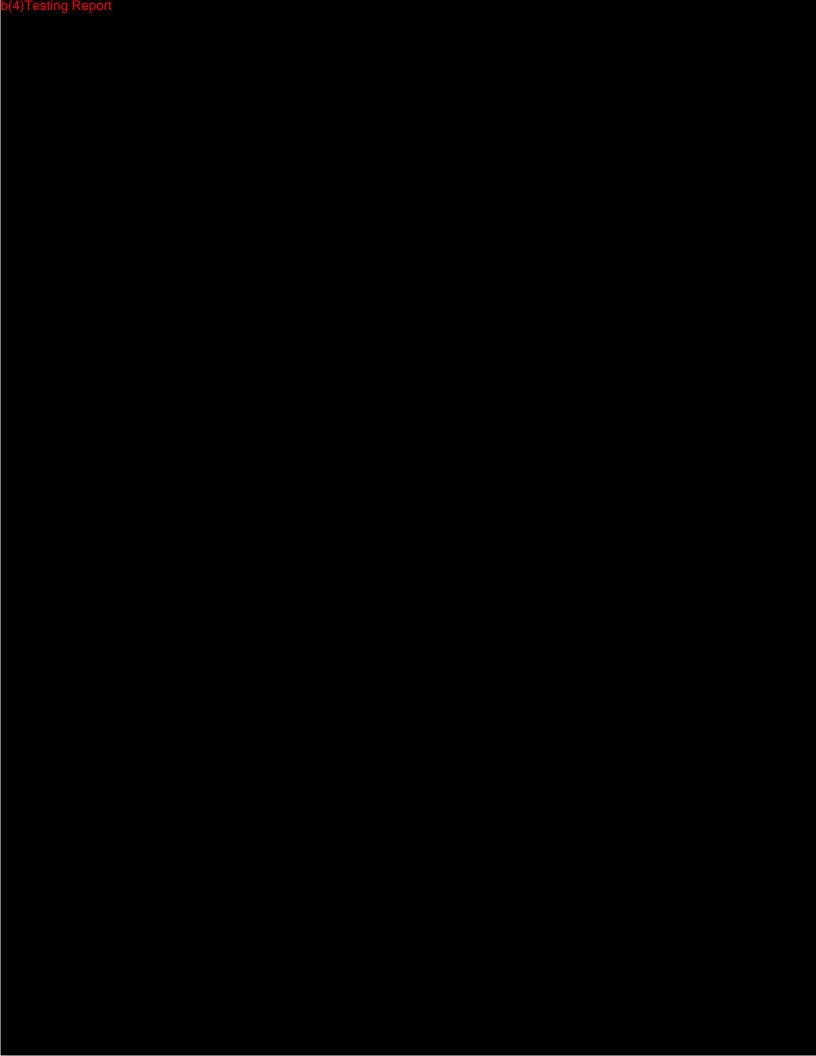




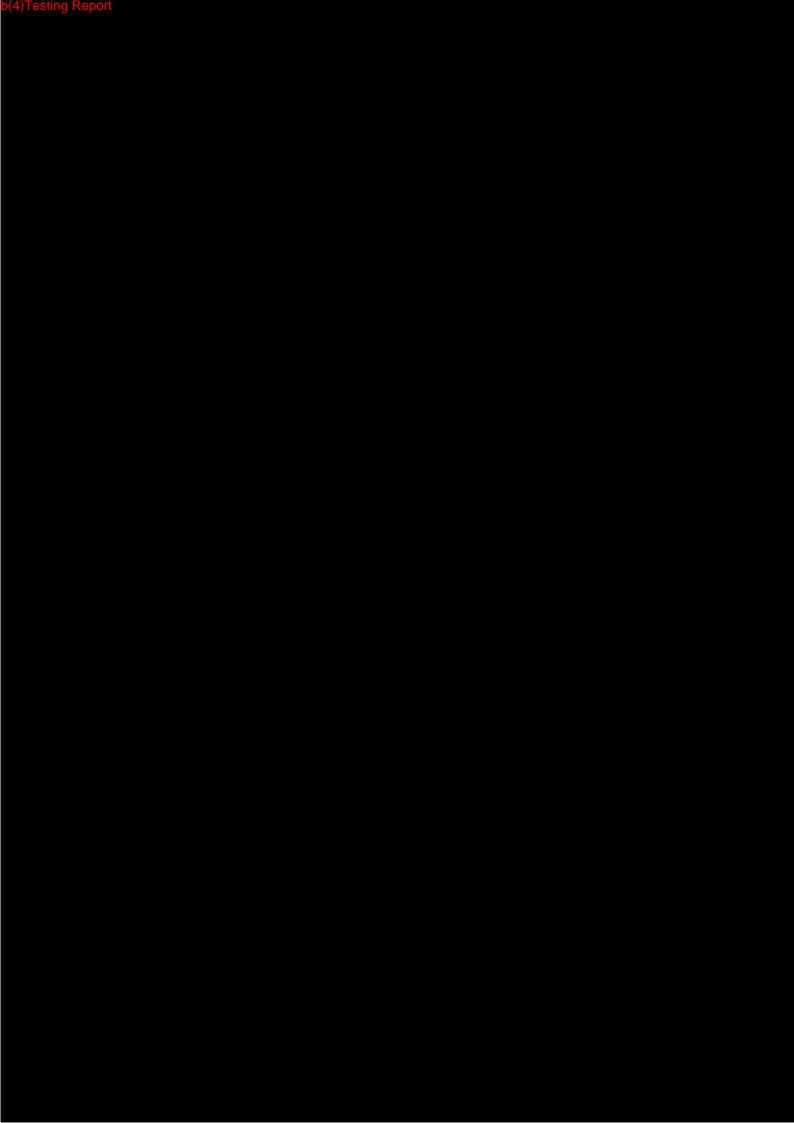


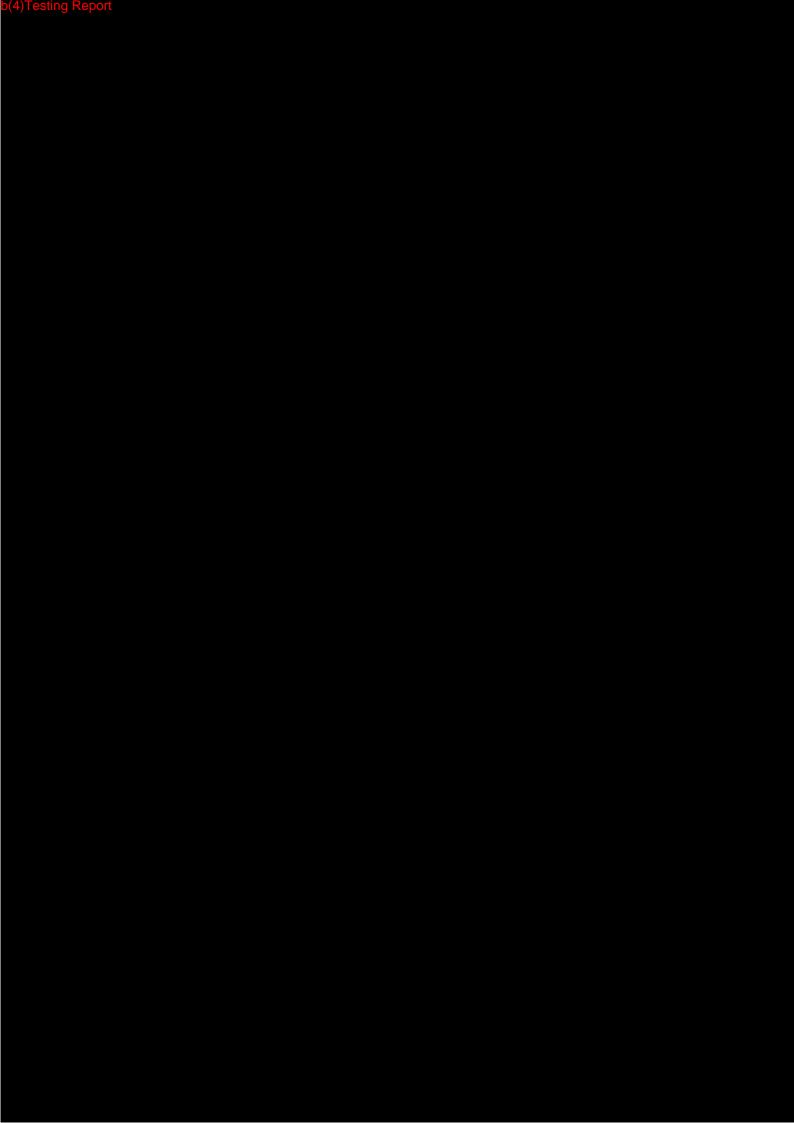


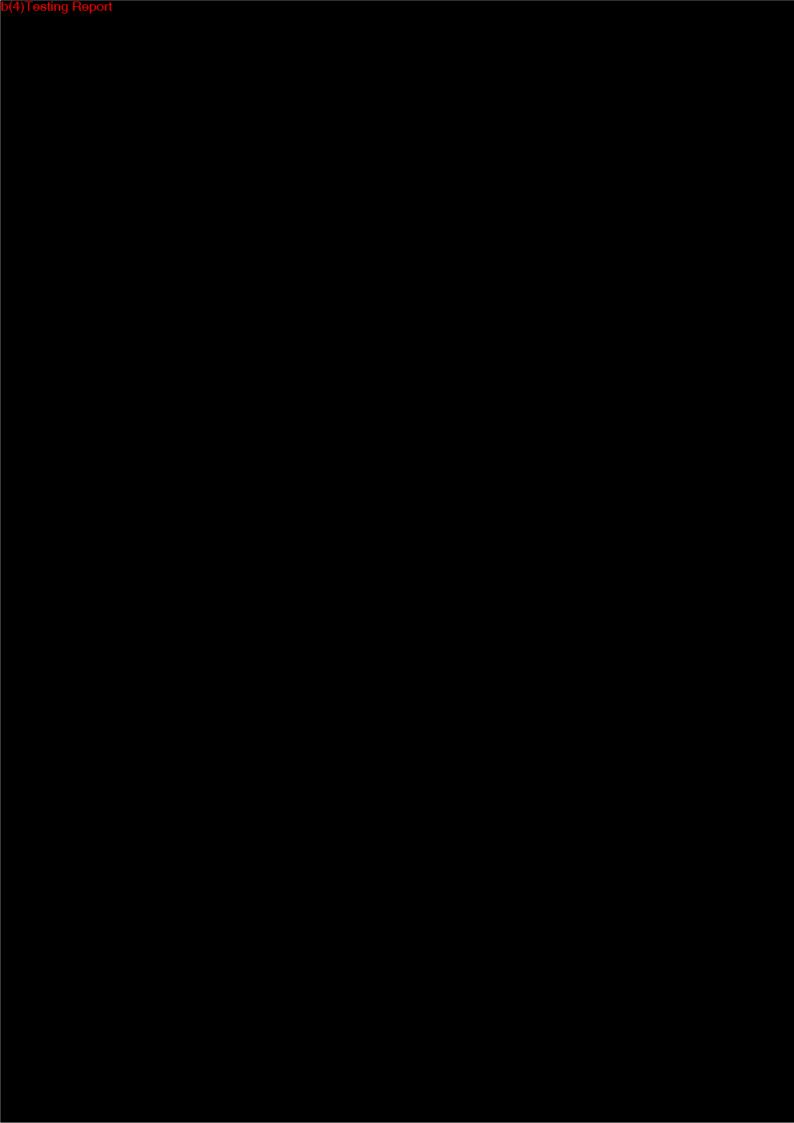


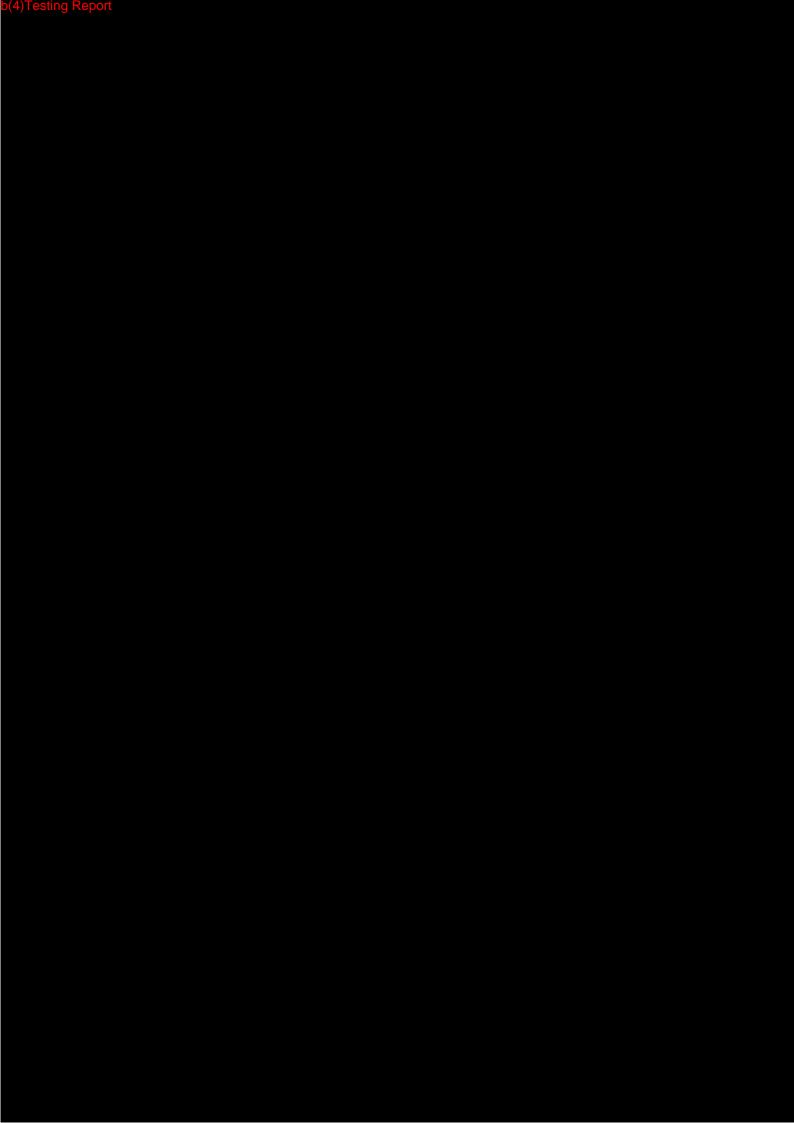


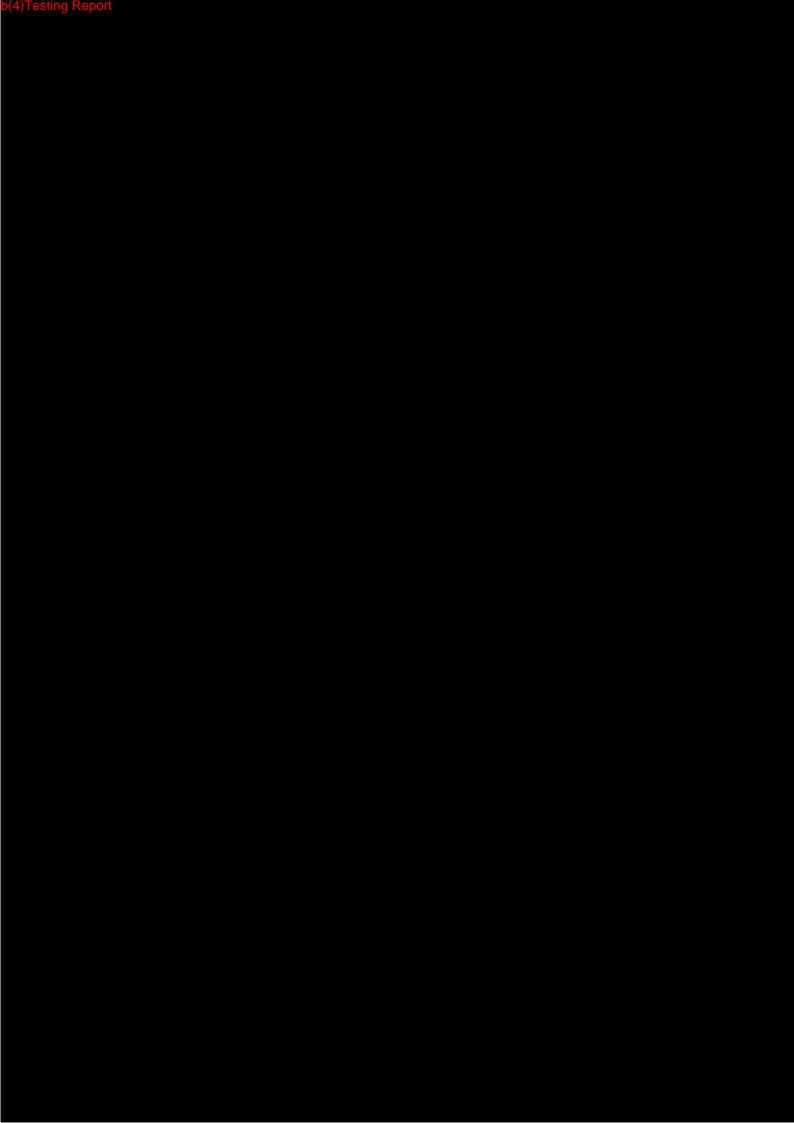
## Annex IV Cytotoxicity Test Report

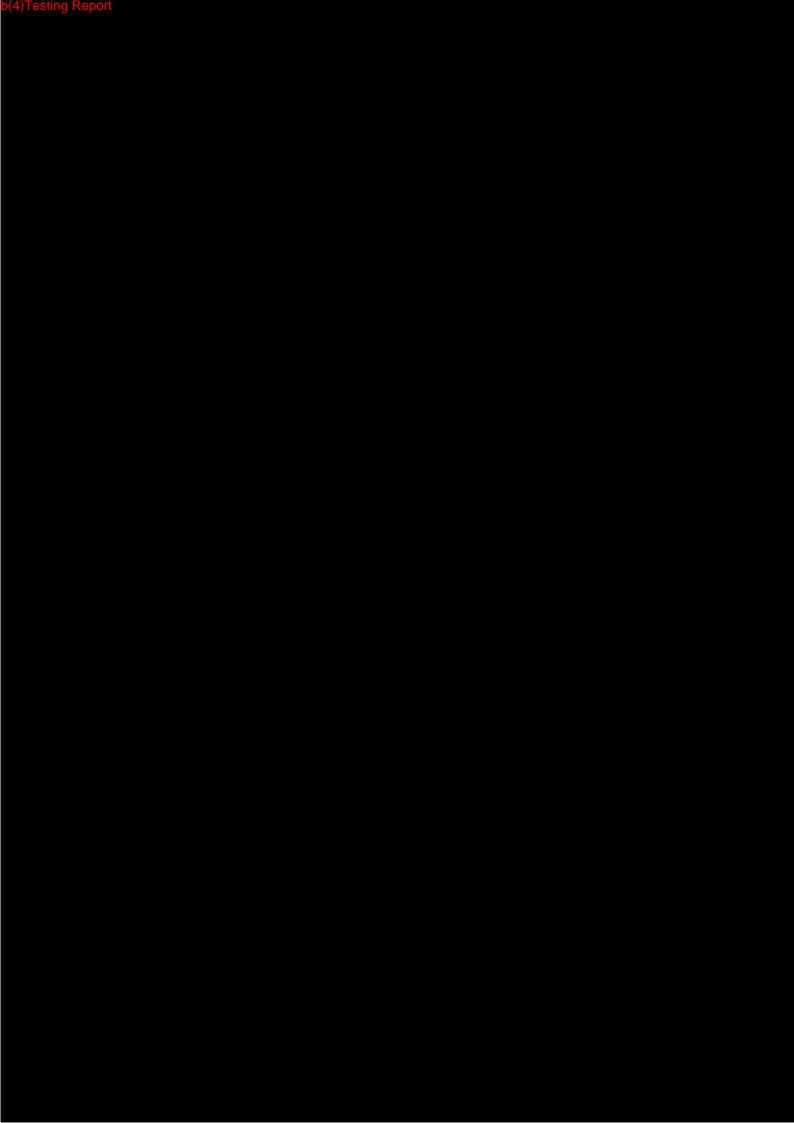


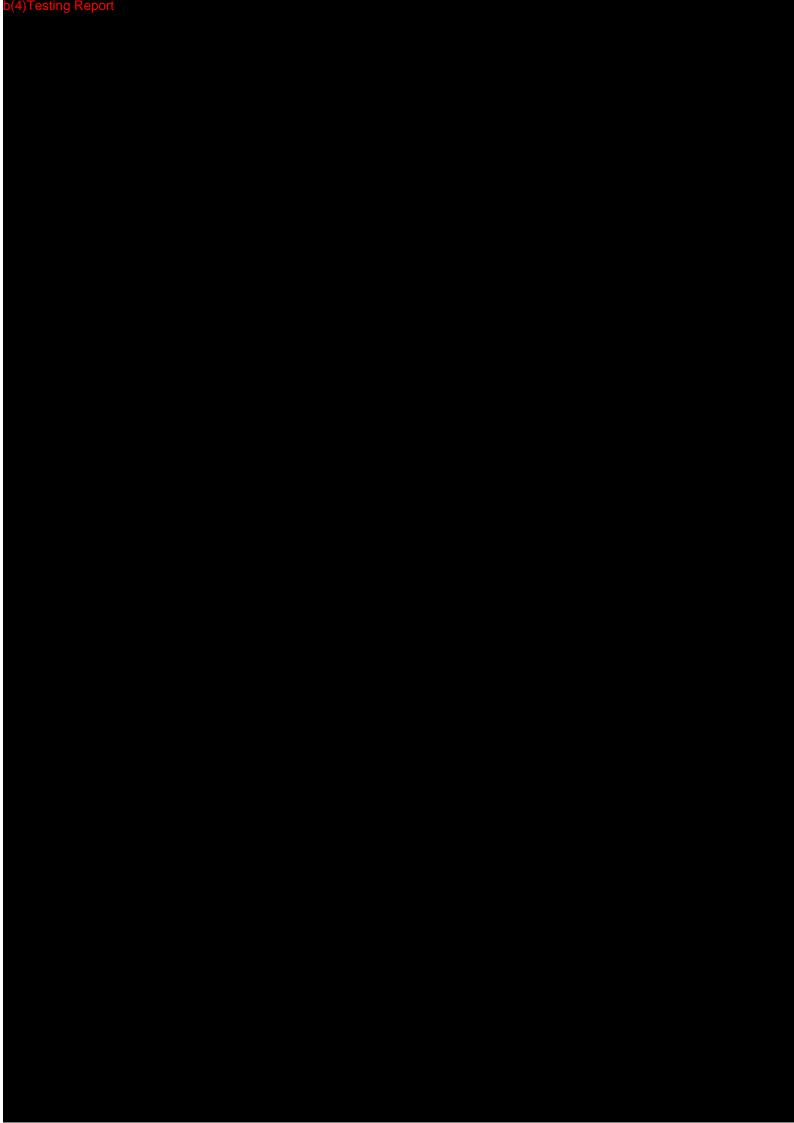


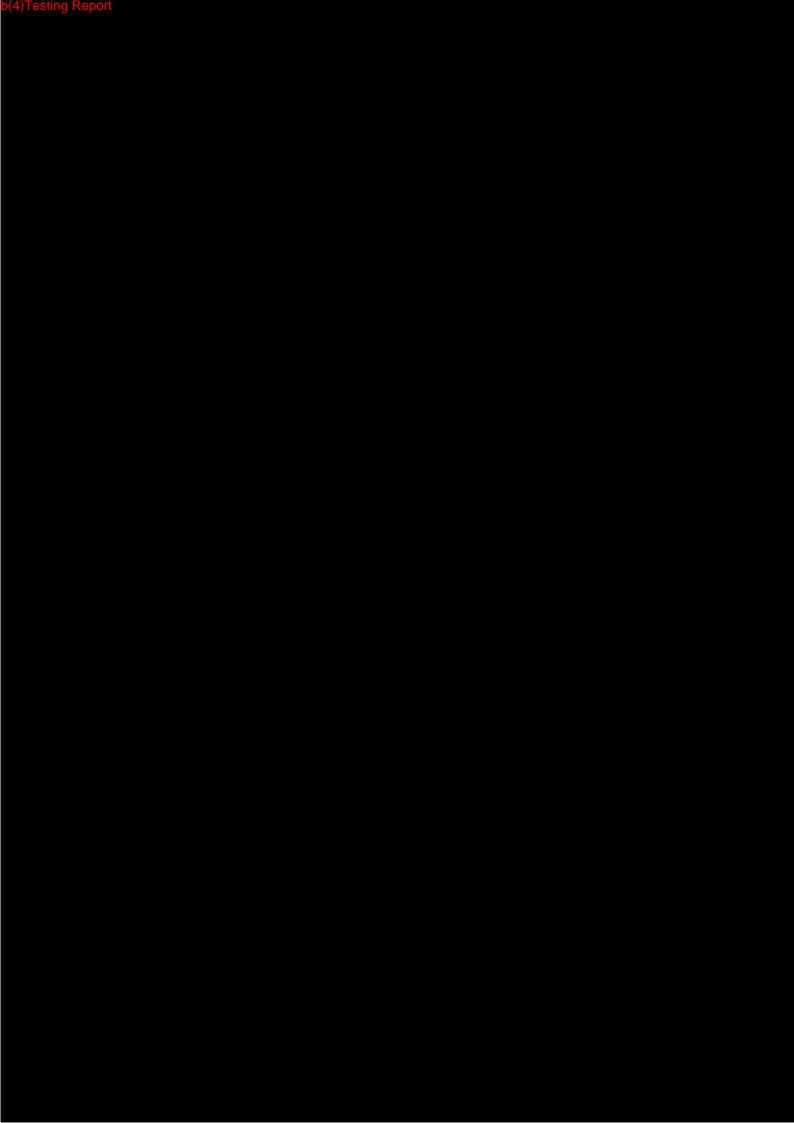


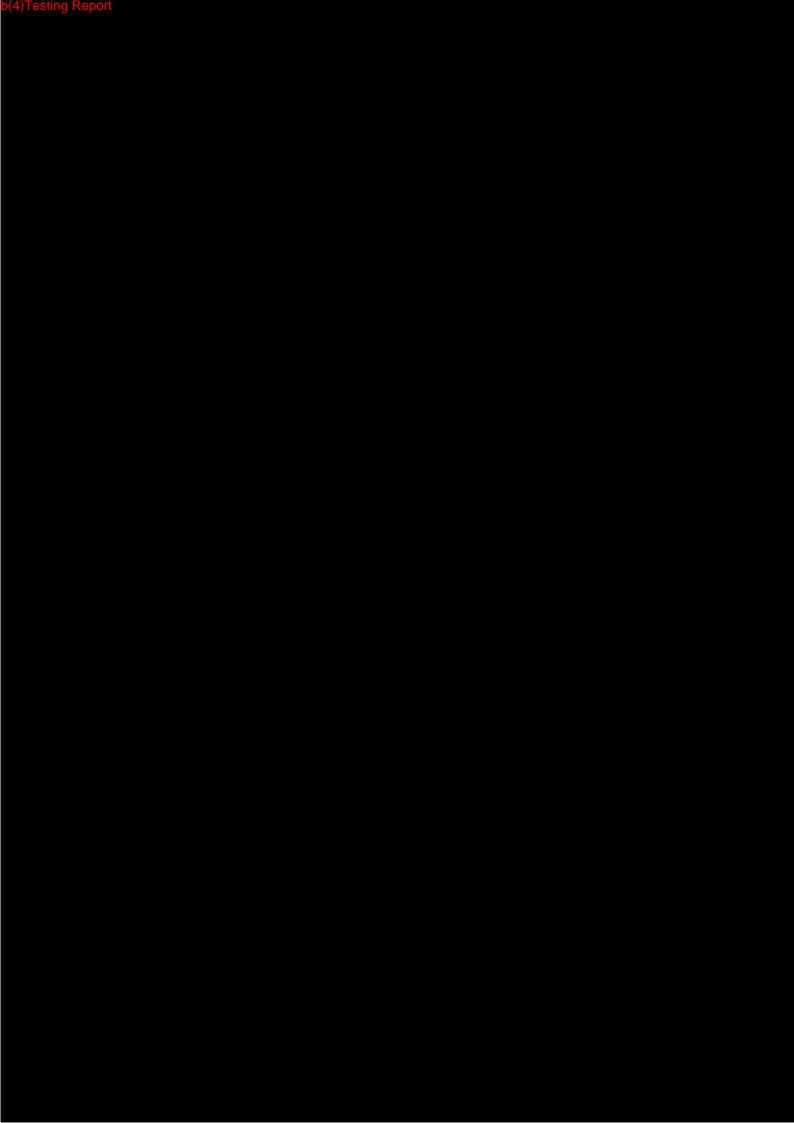


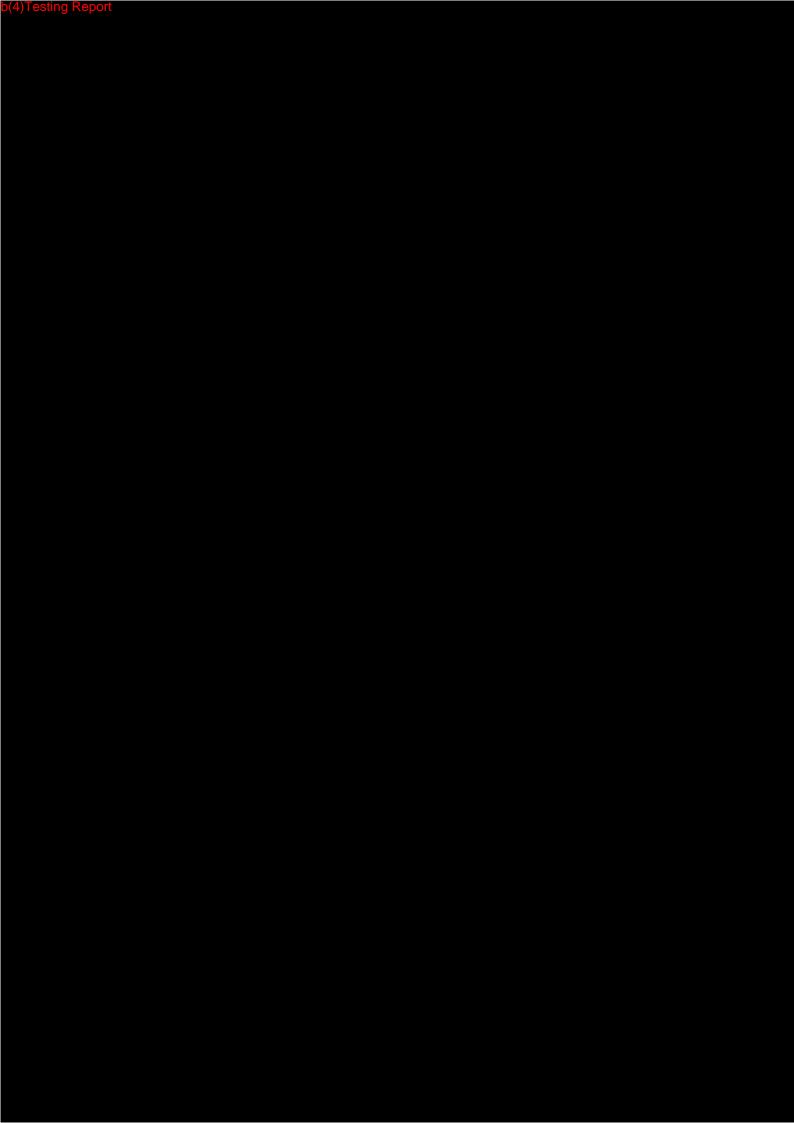


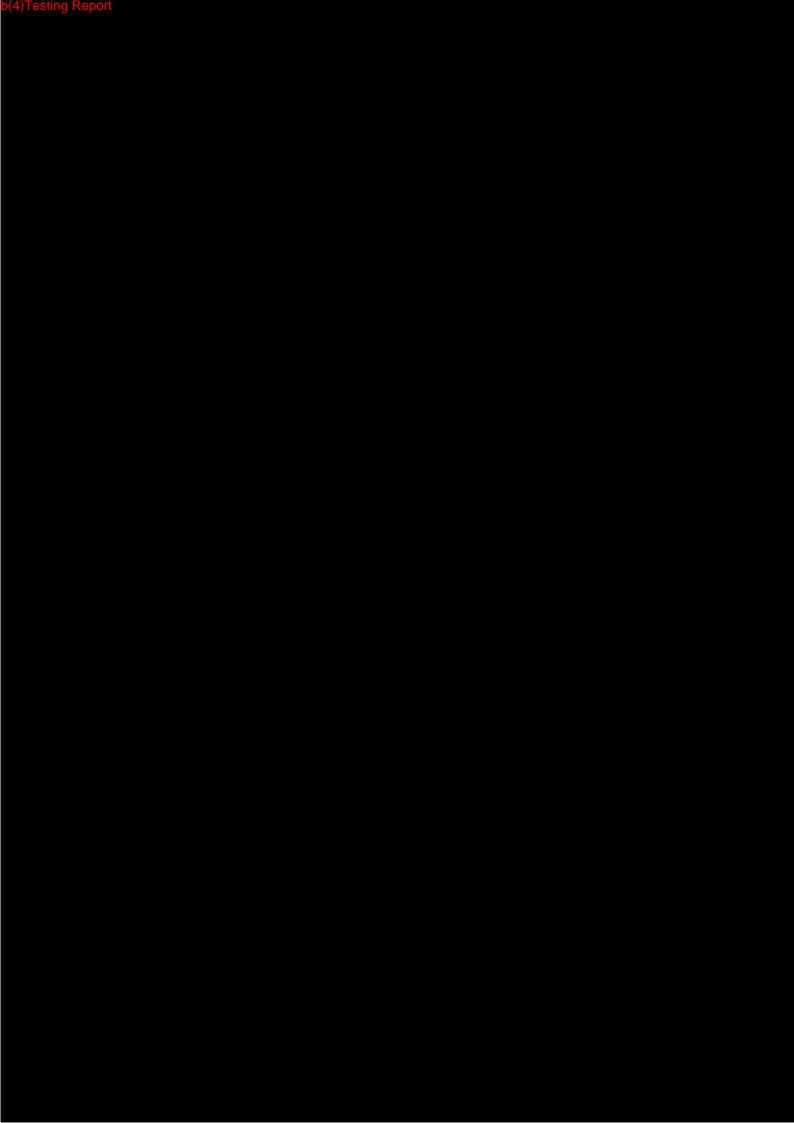


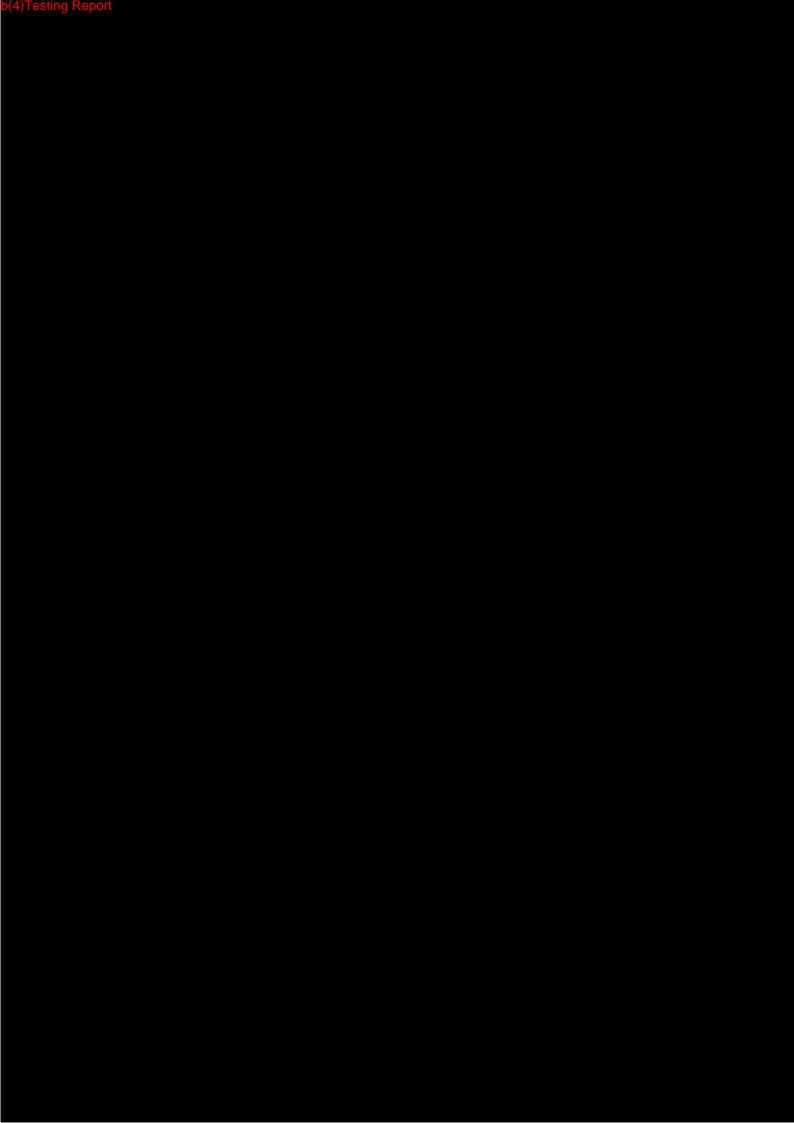


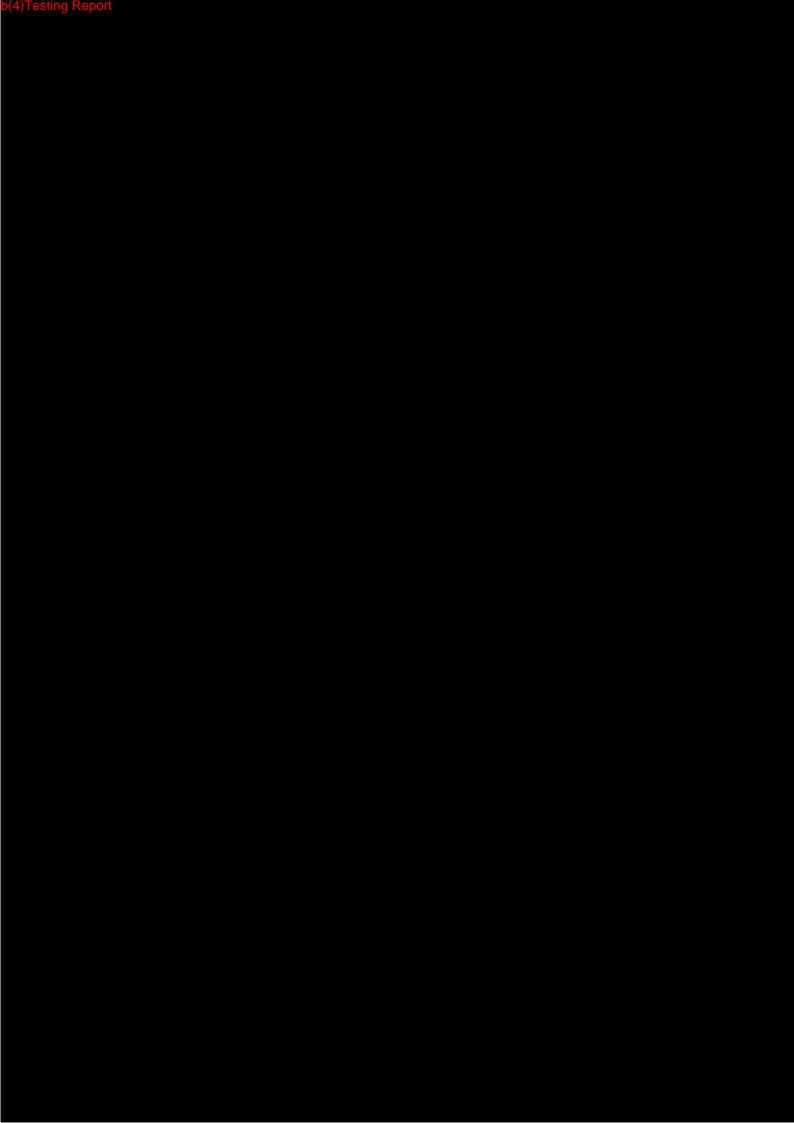


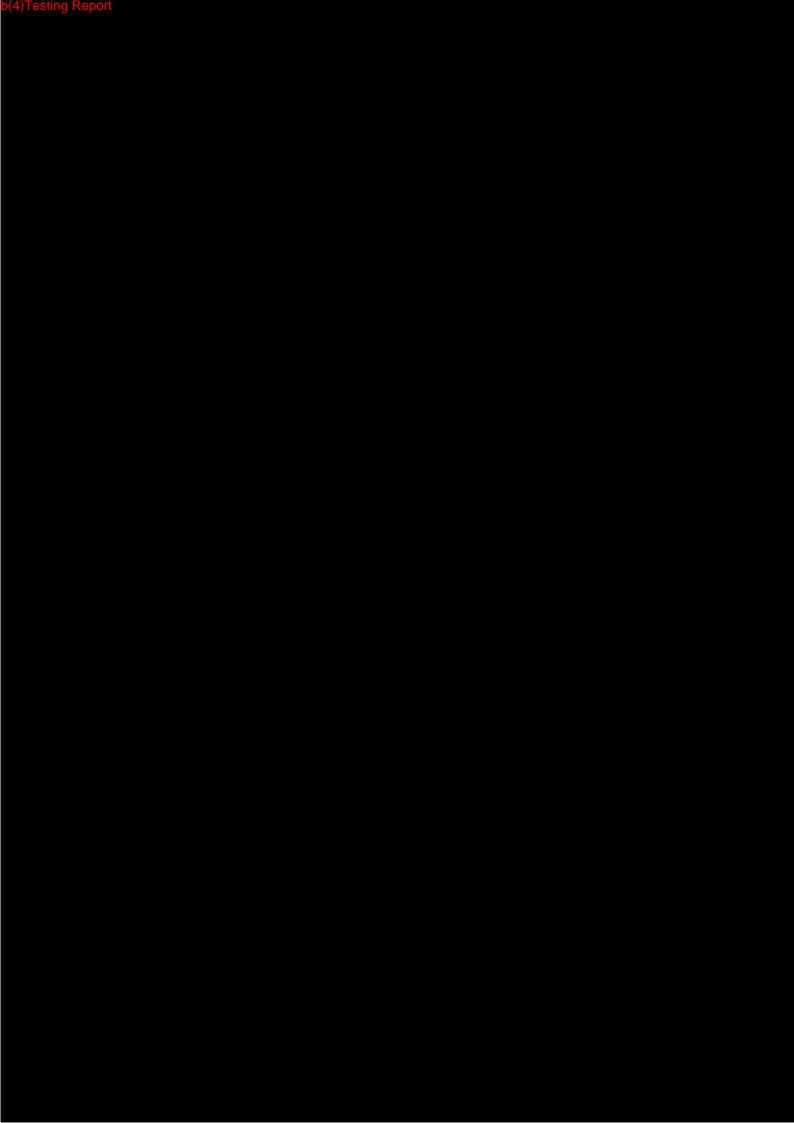


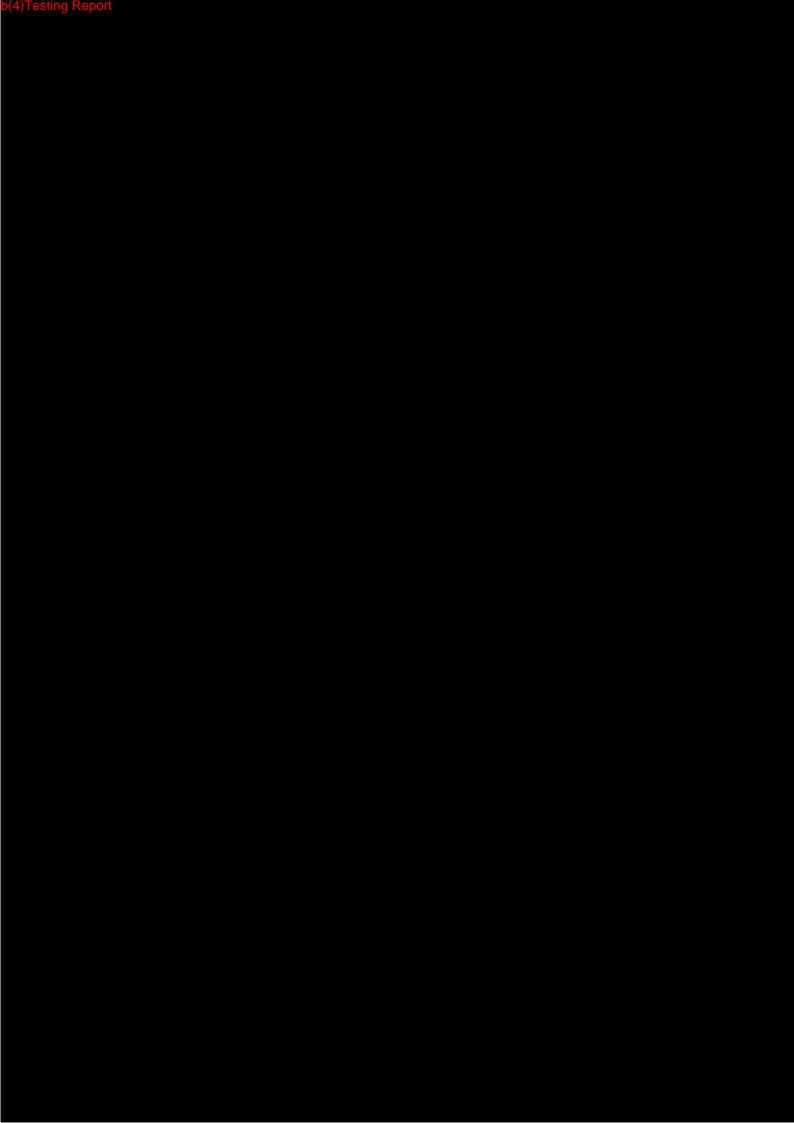


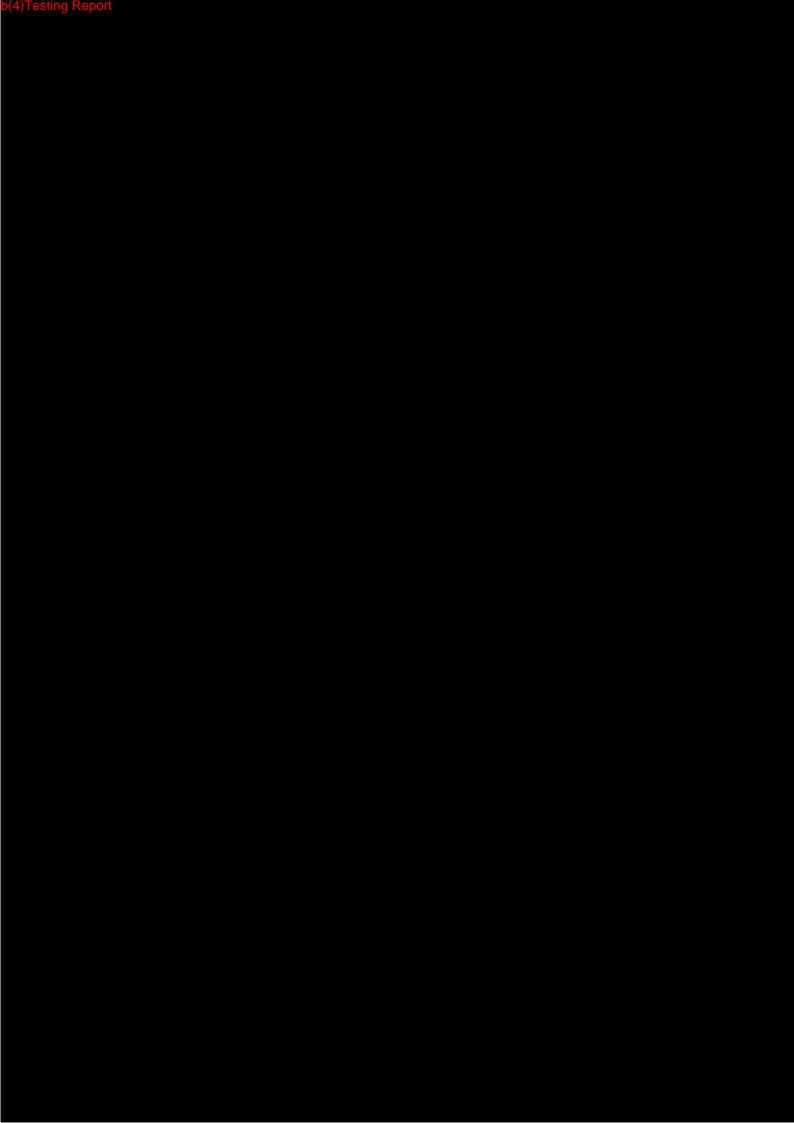






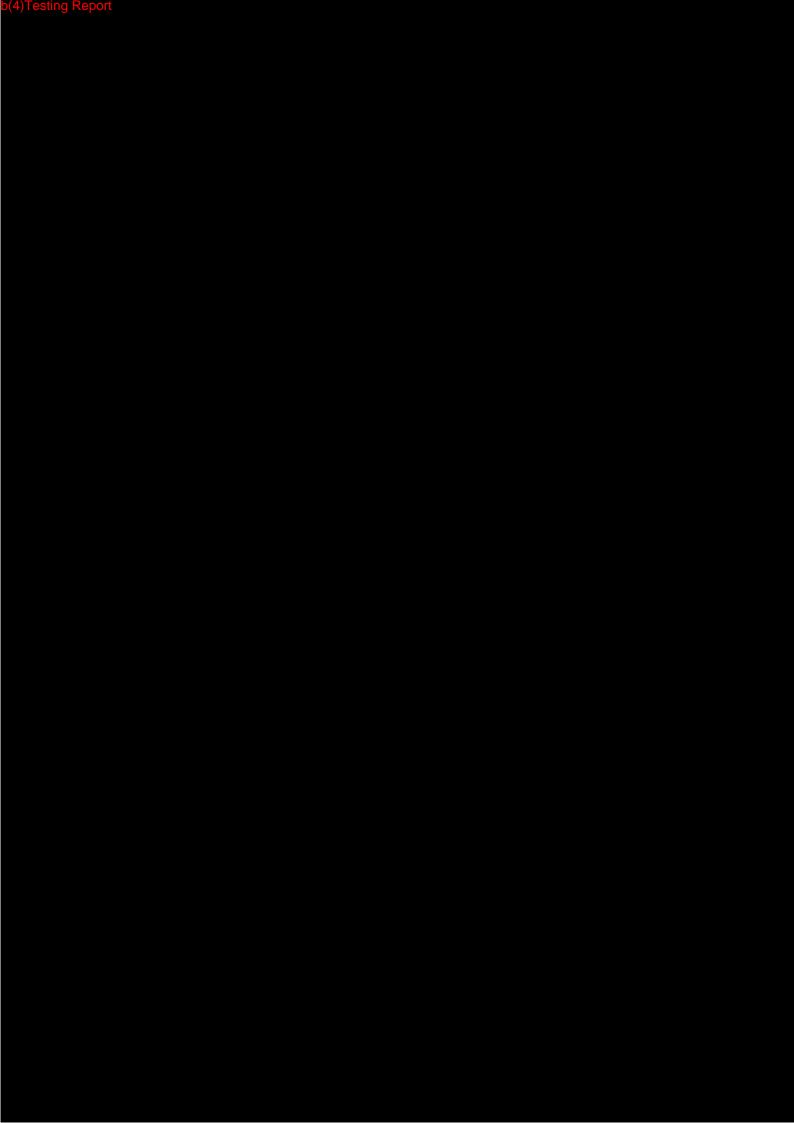


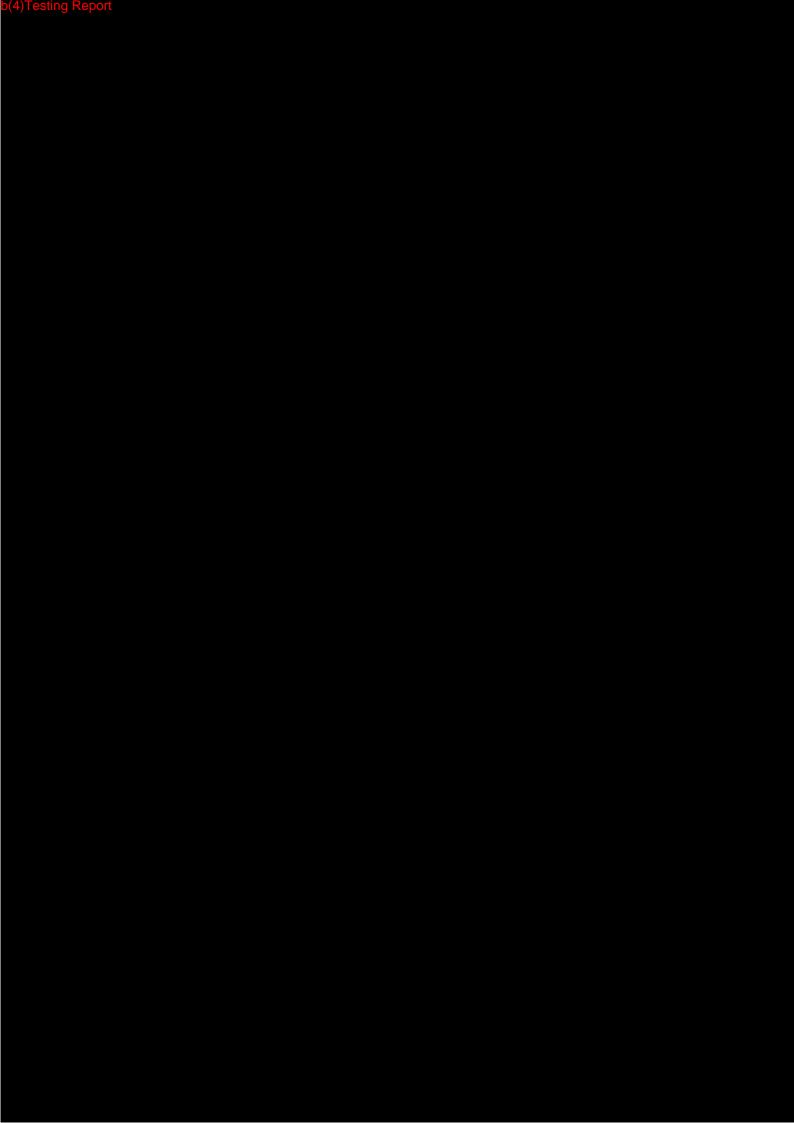


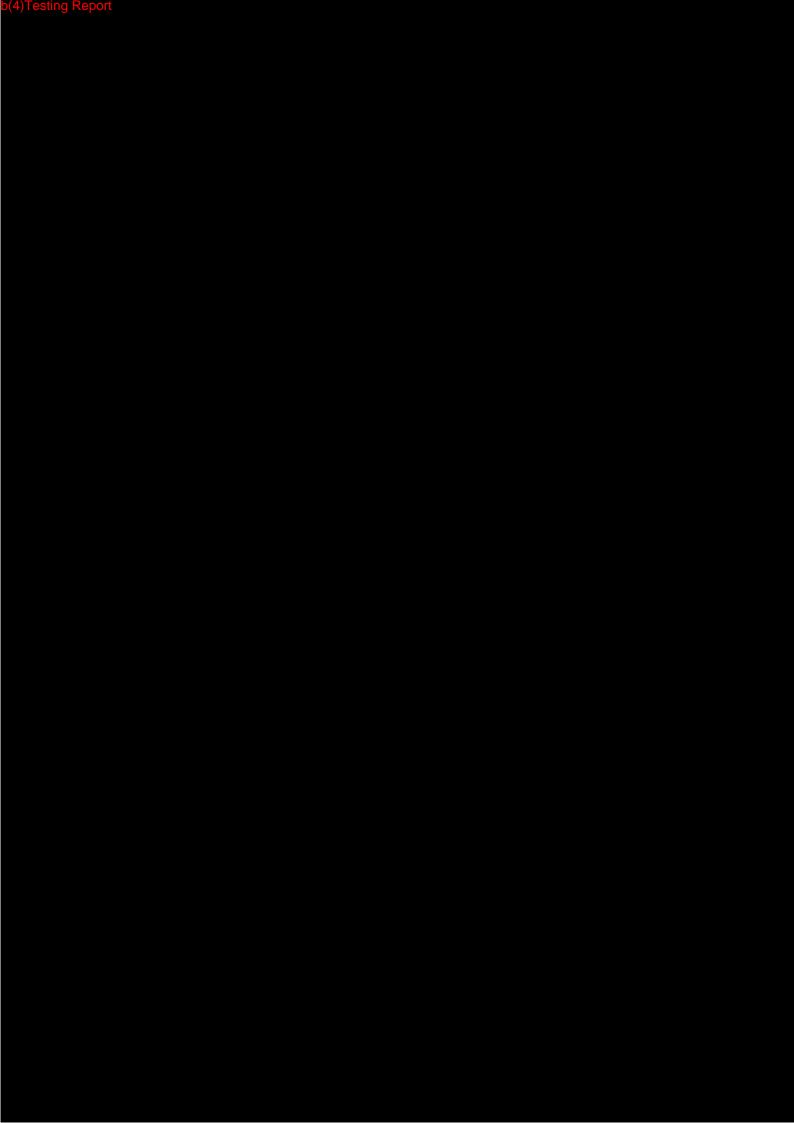


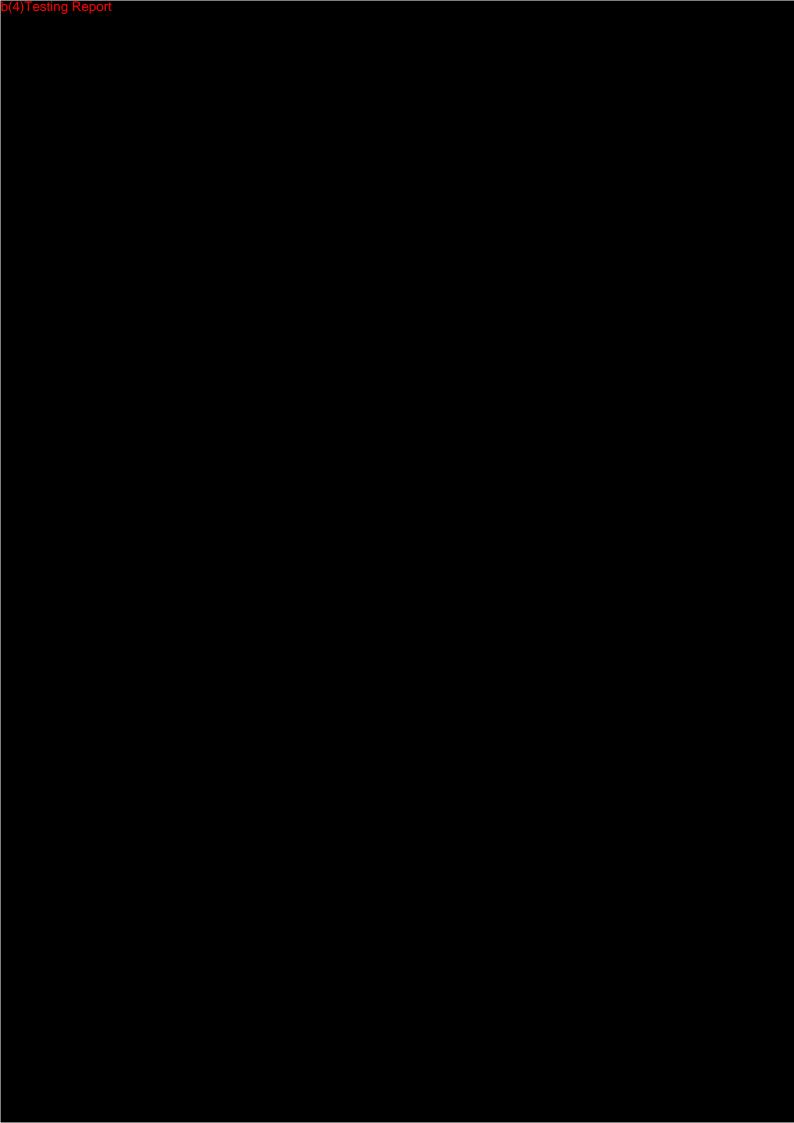
## Annex V Skin Irritation Test Report











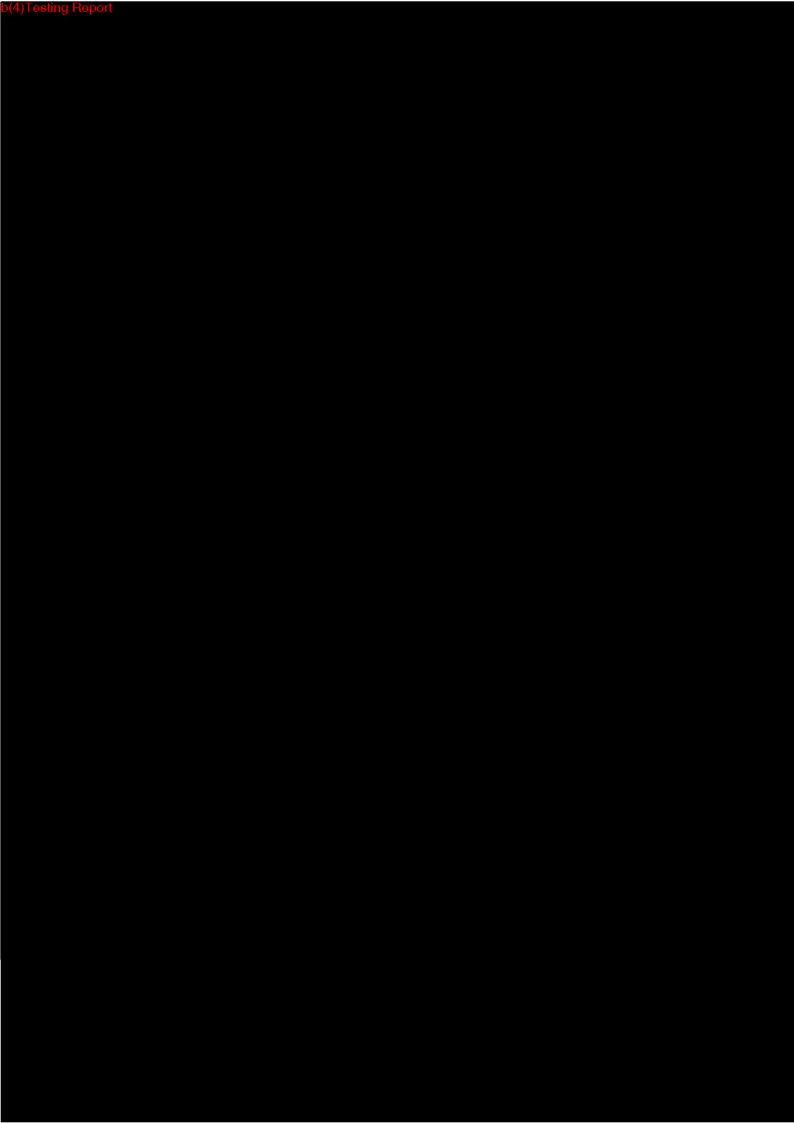






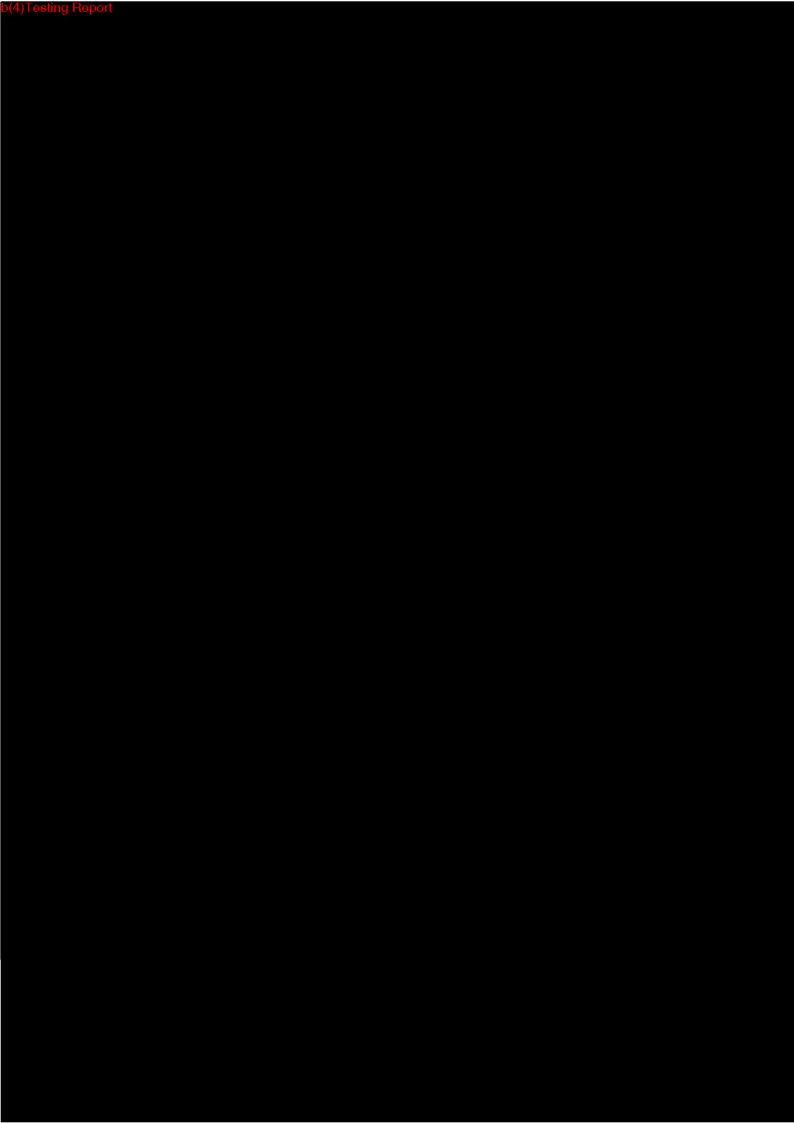








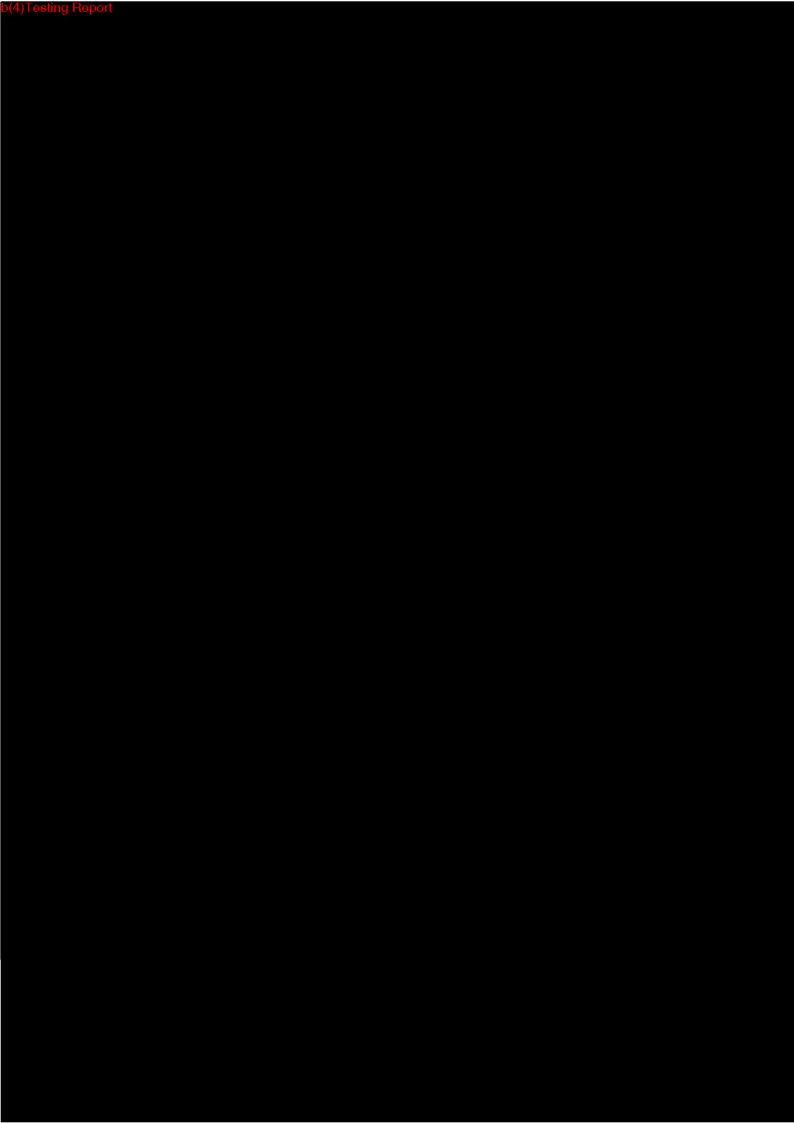






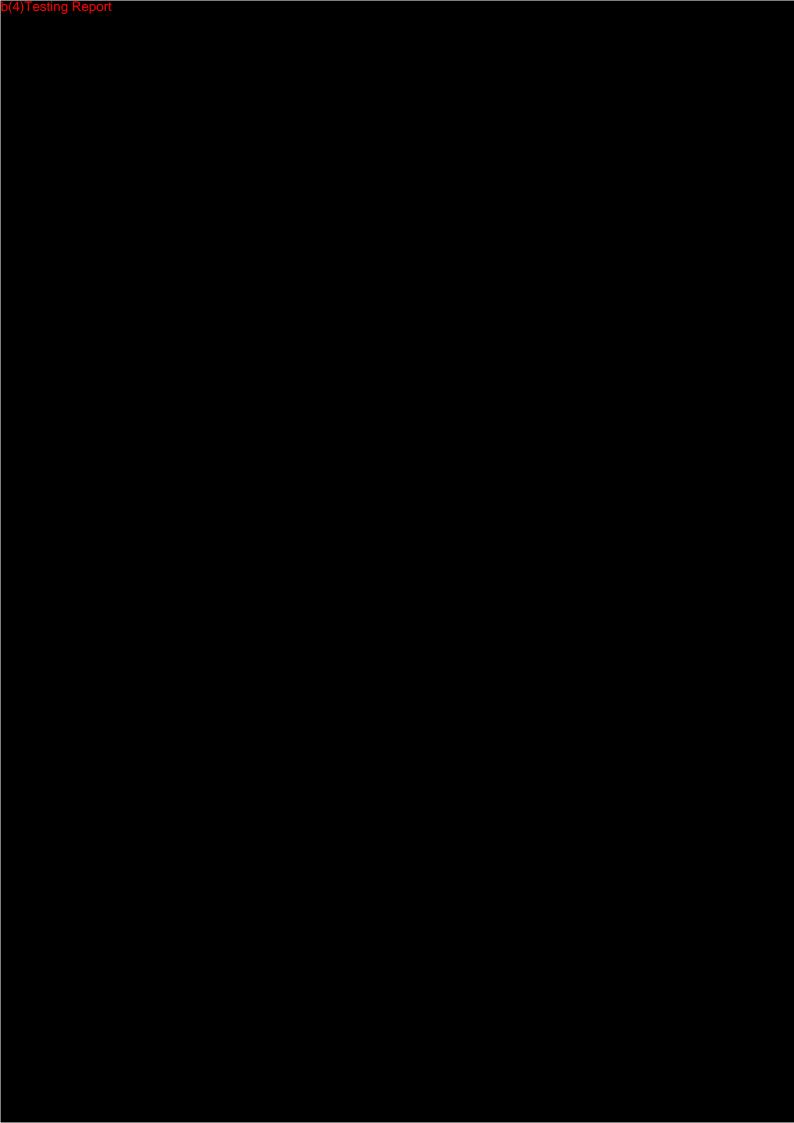


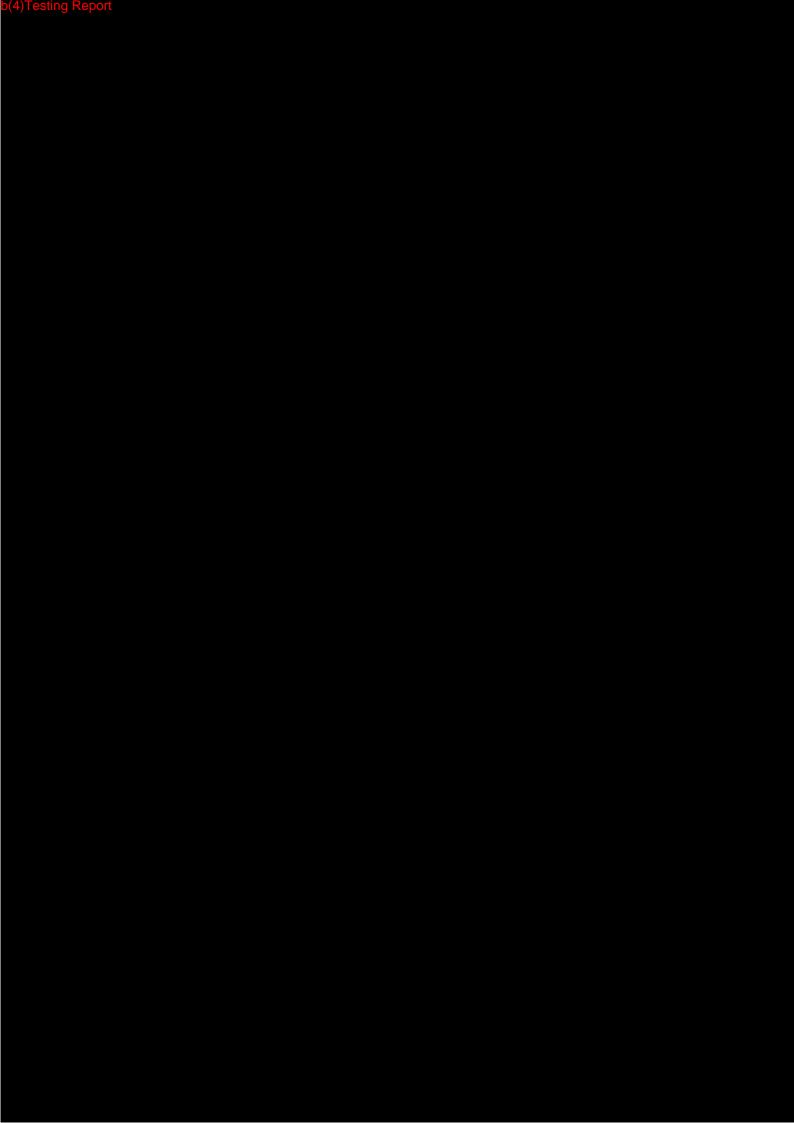


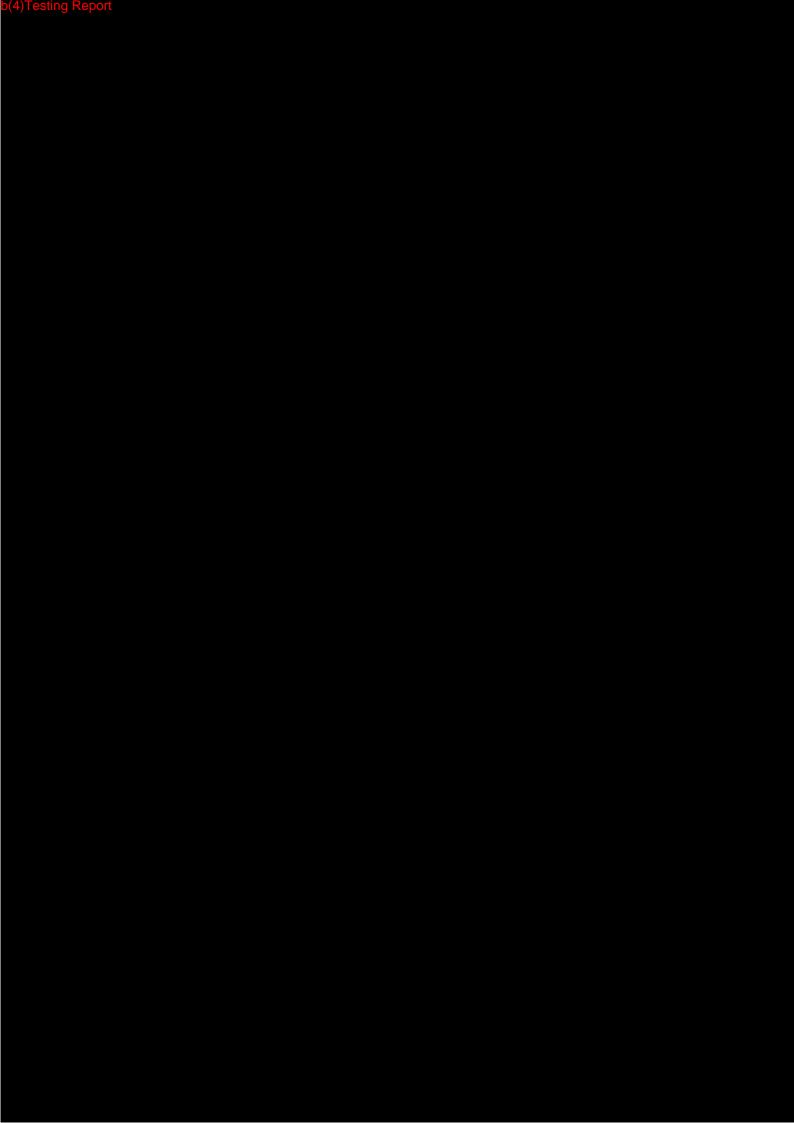


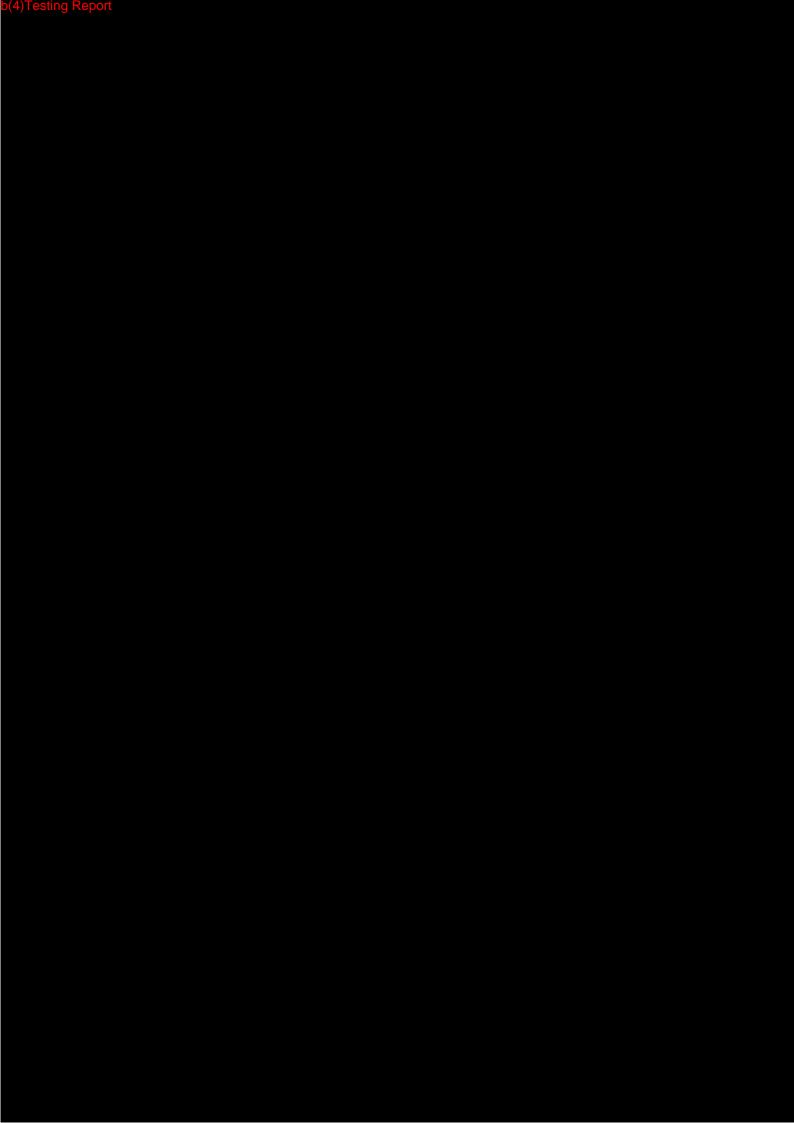


## Annex VI Skin Sensitization Test Report





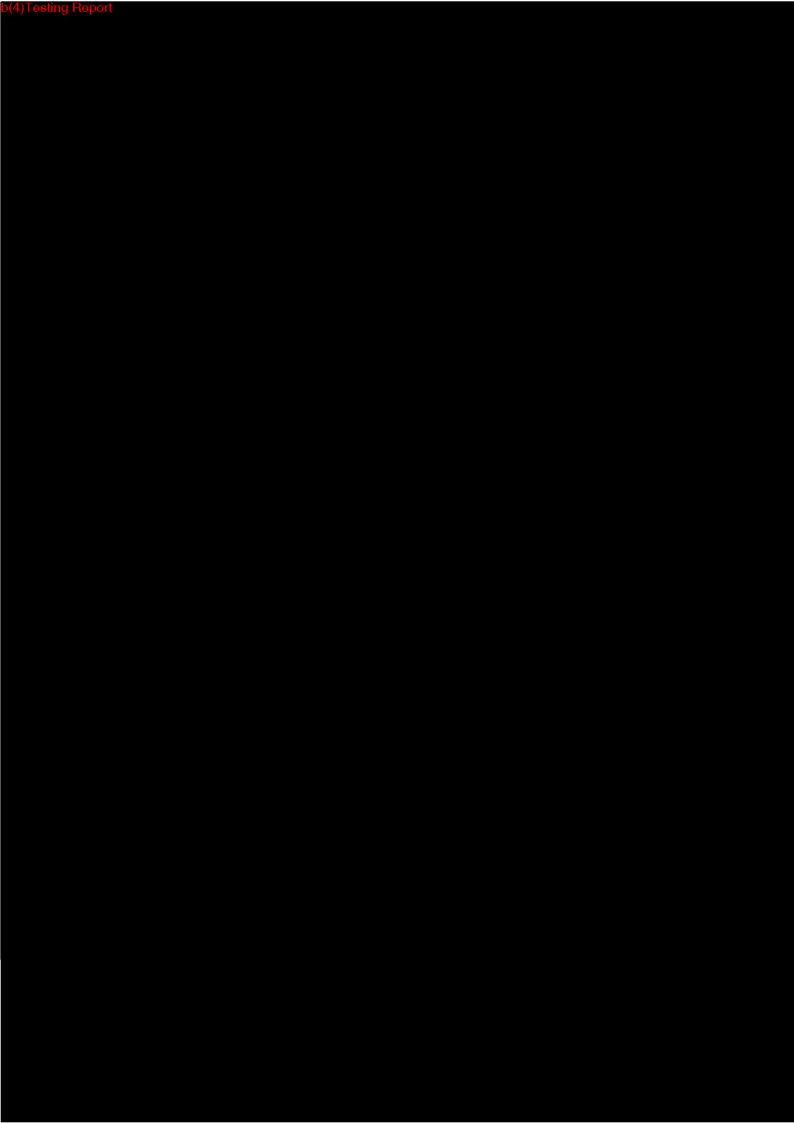




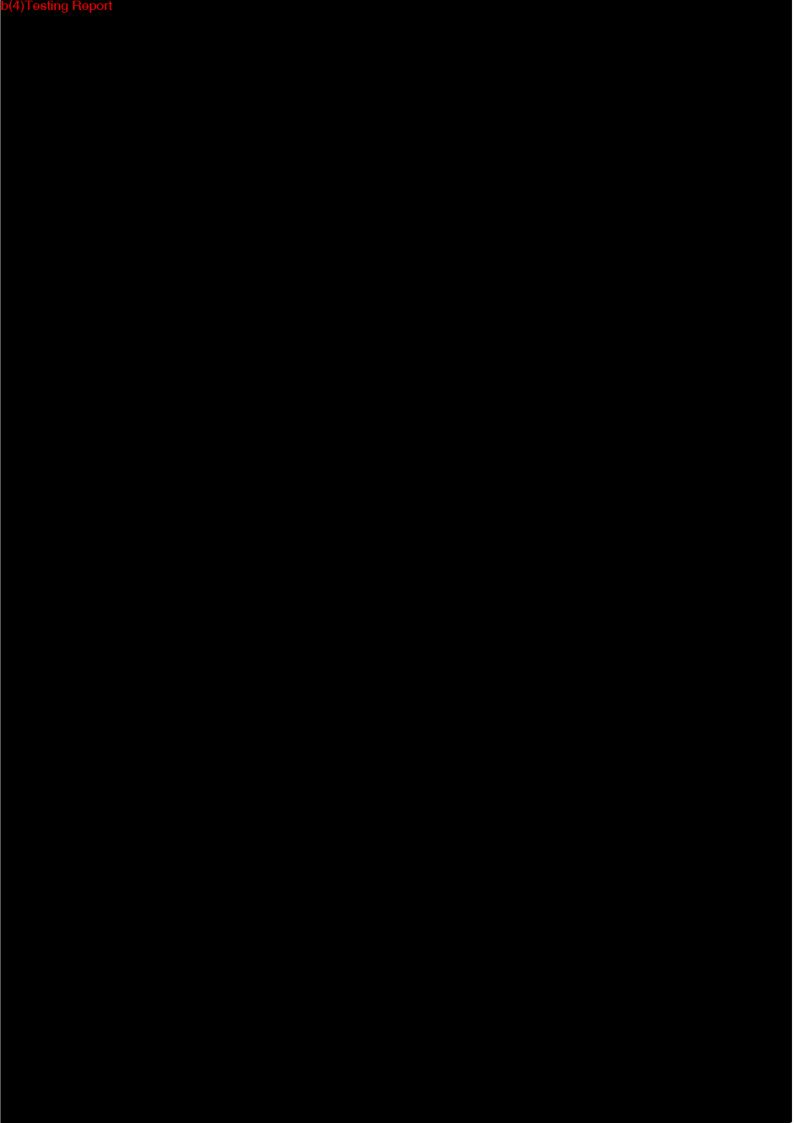












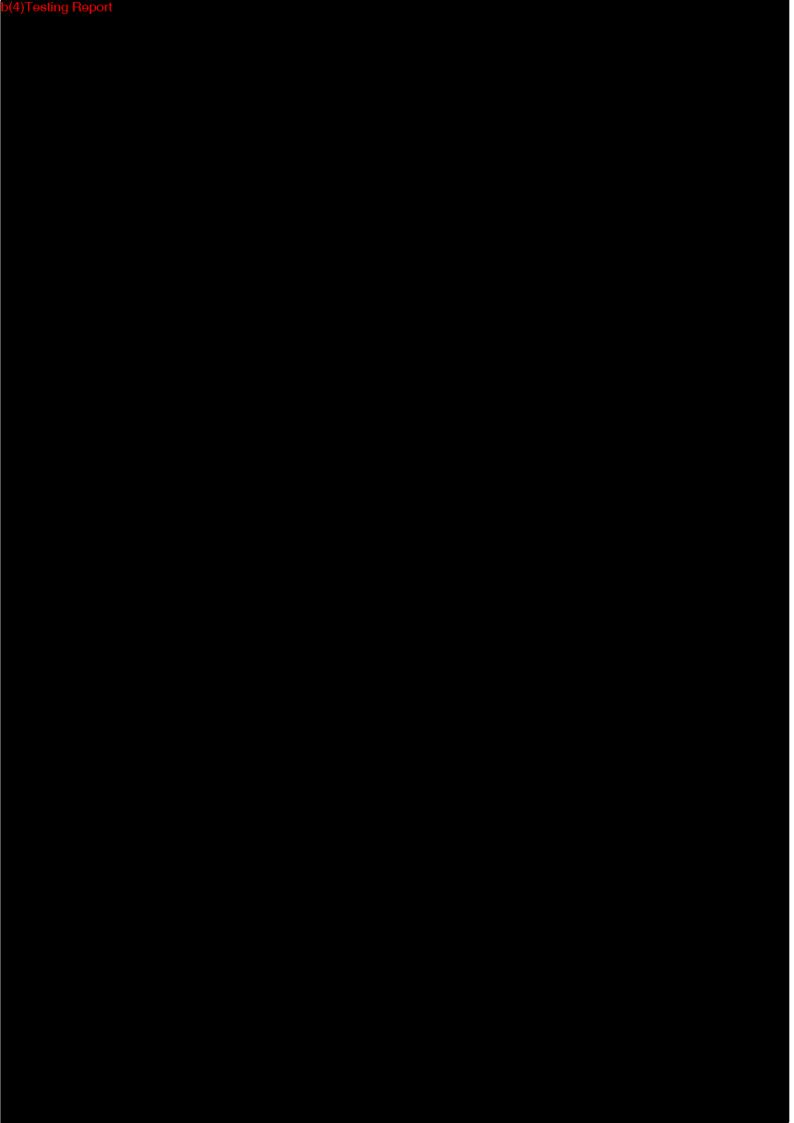




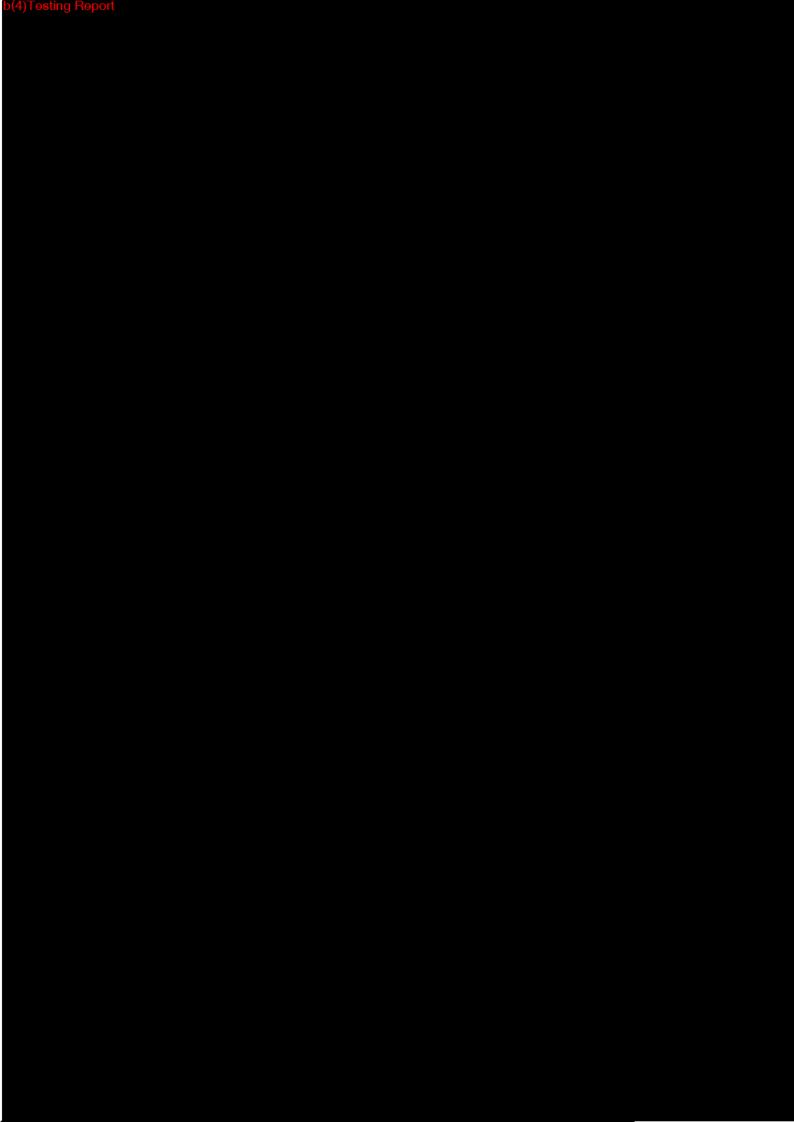


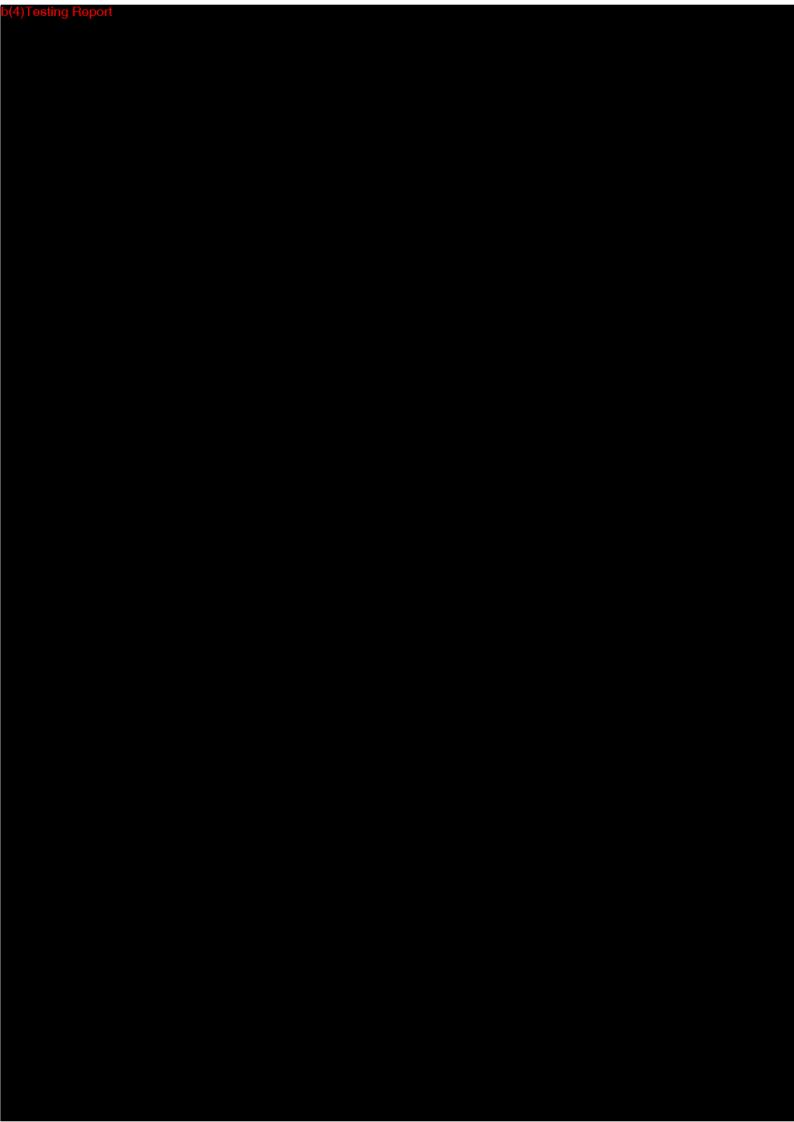




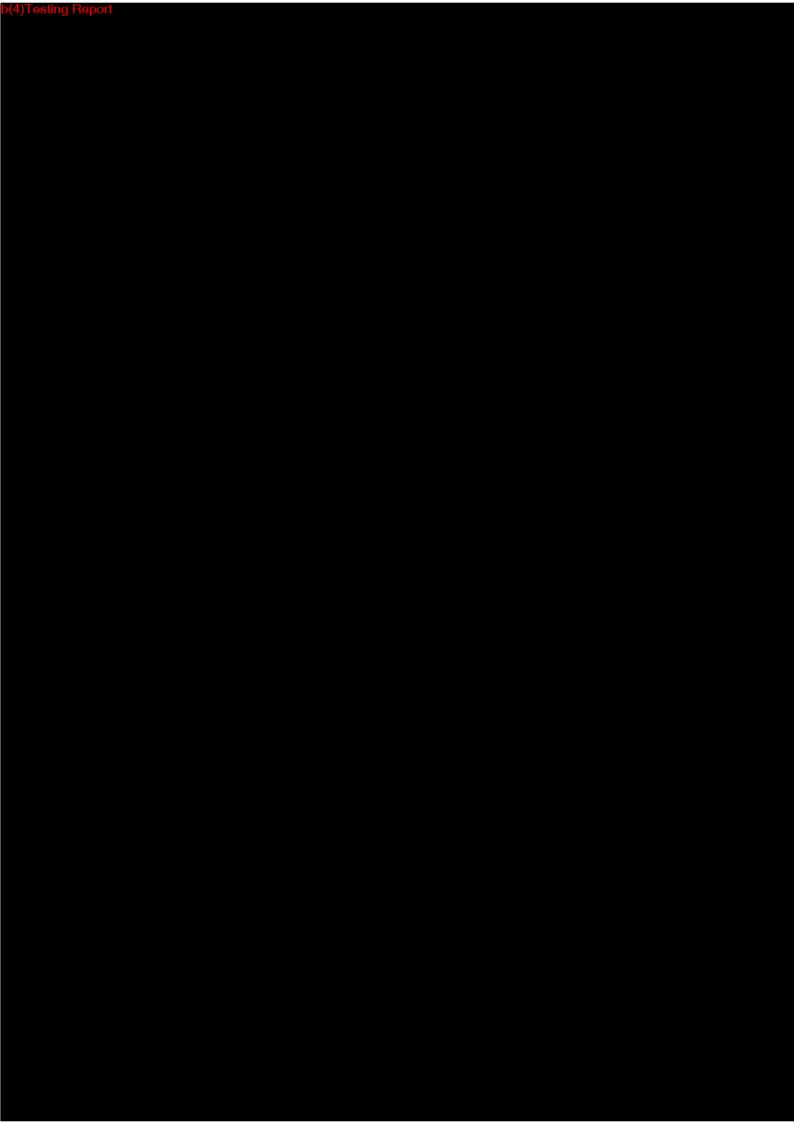






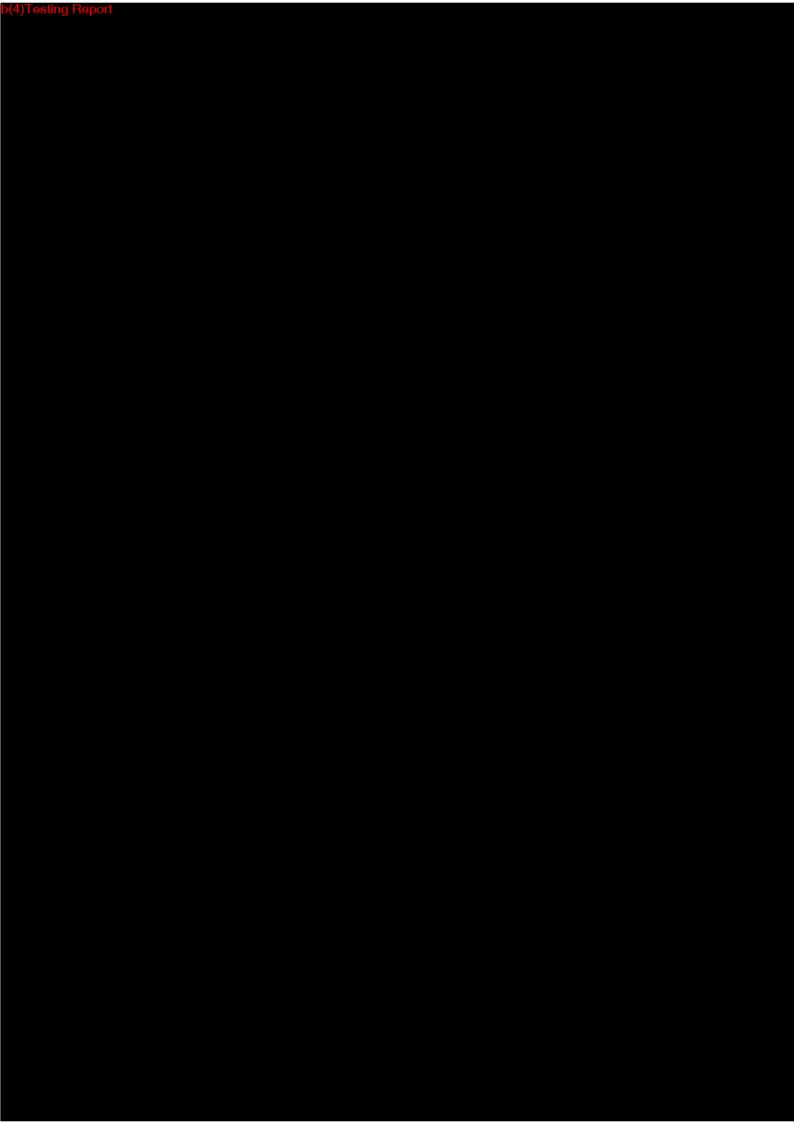








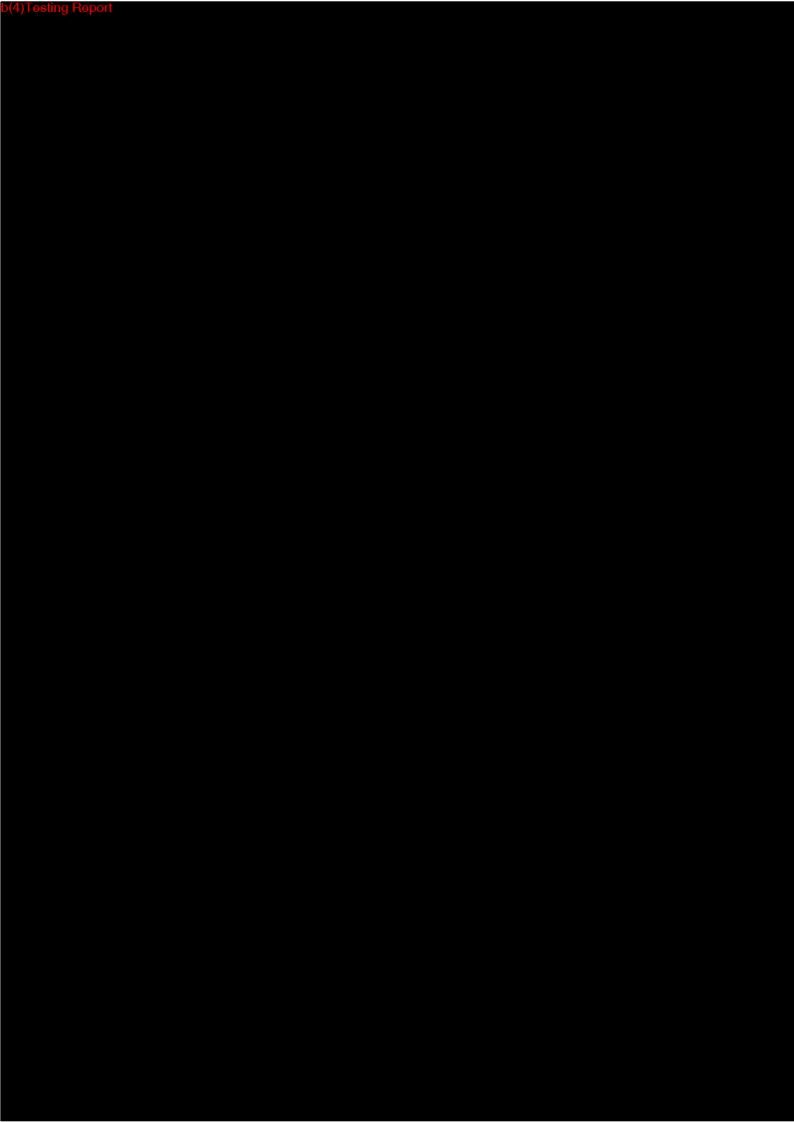






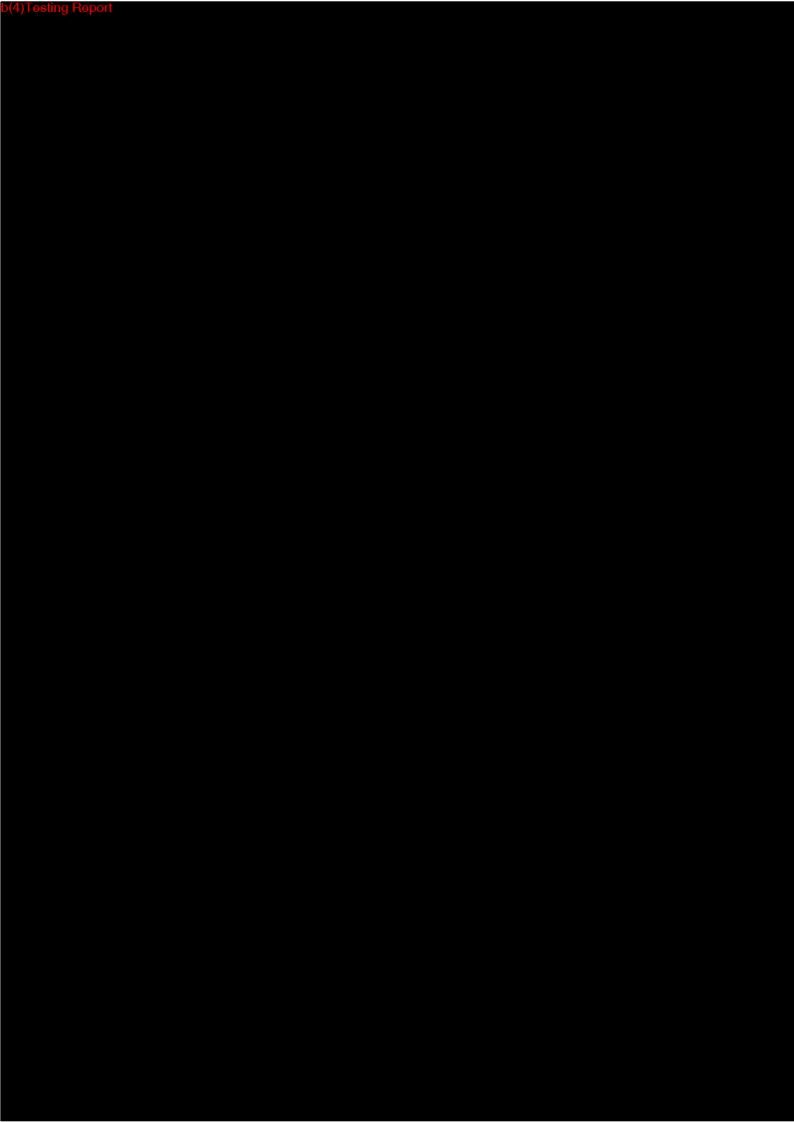




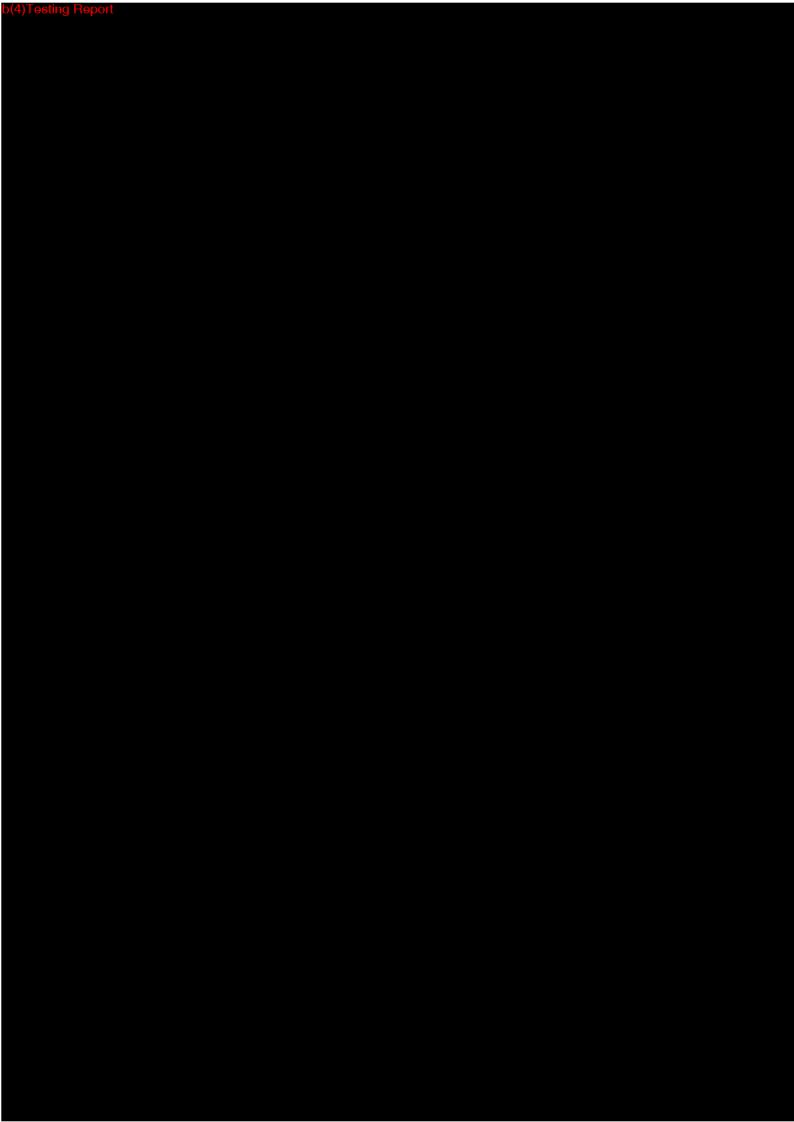












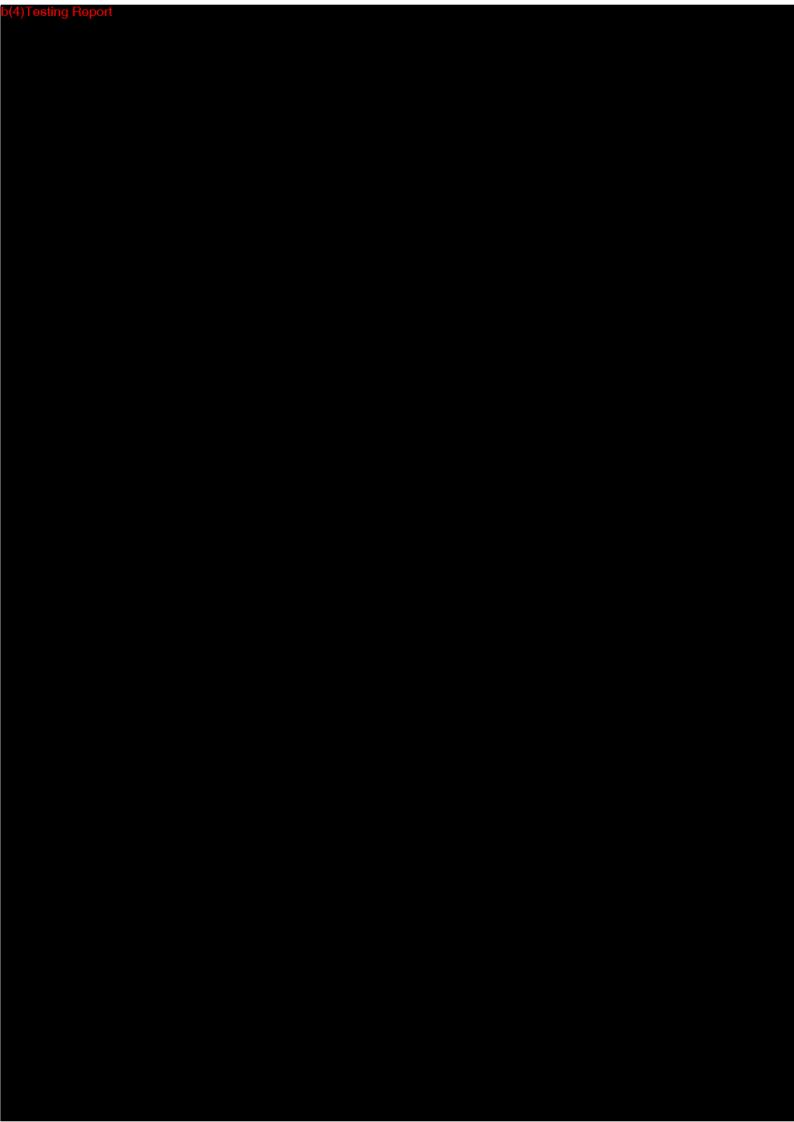




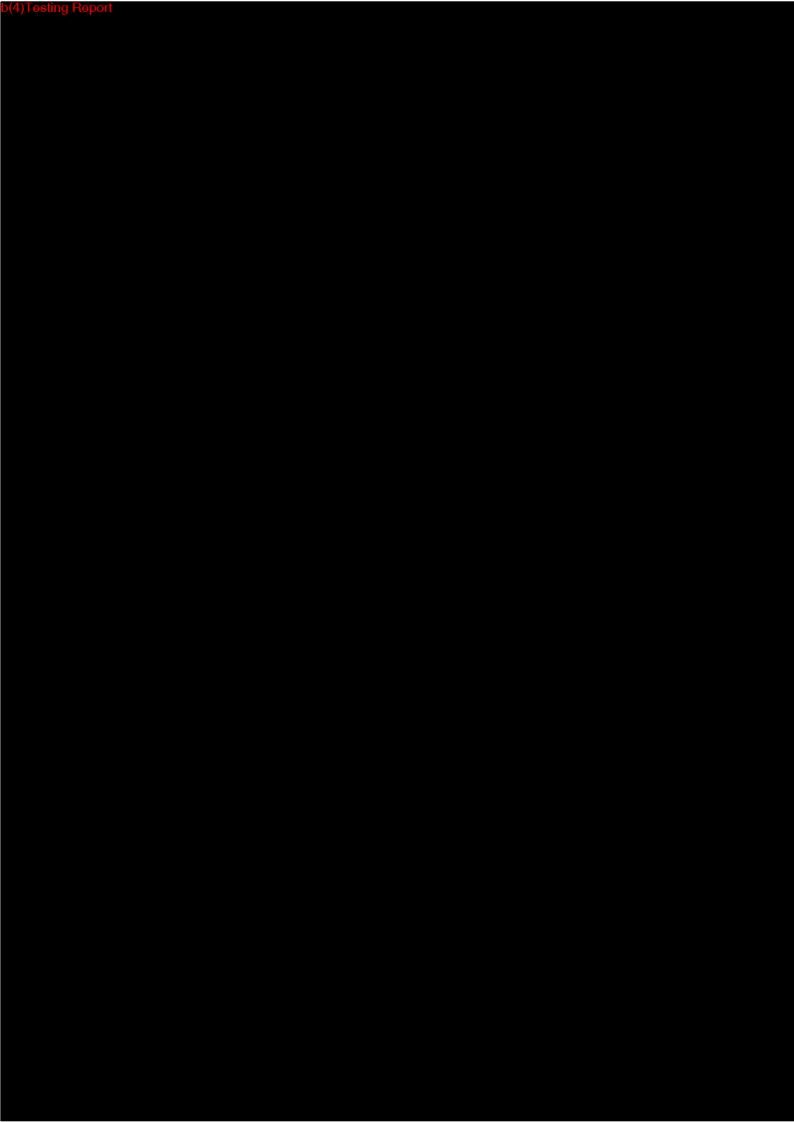








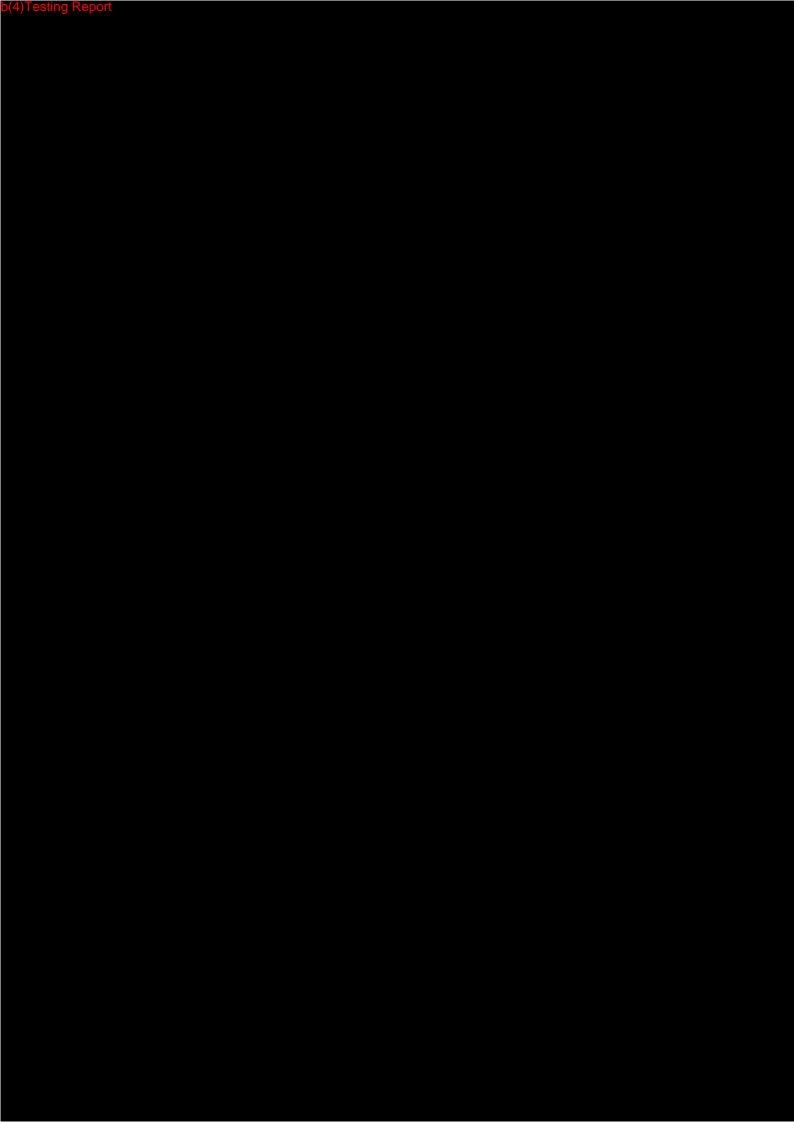






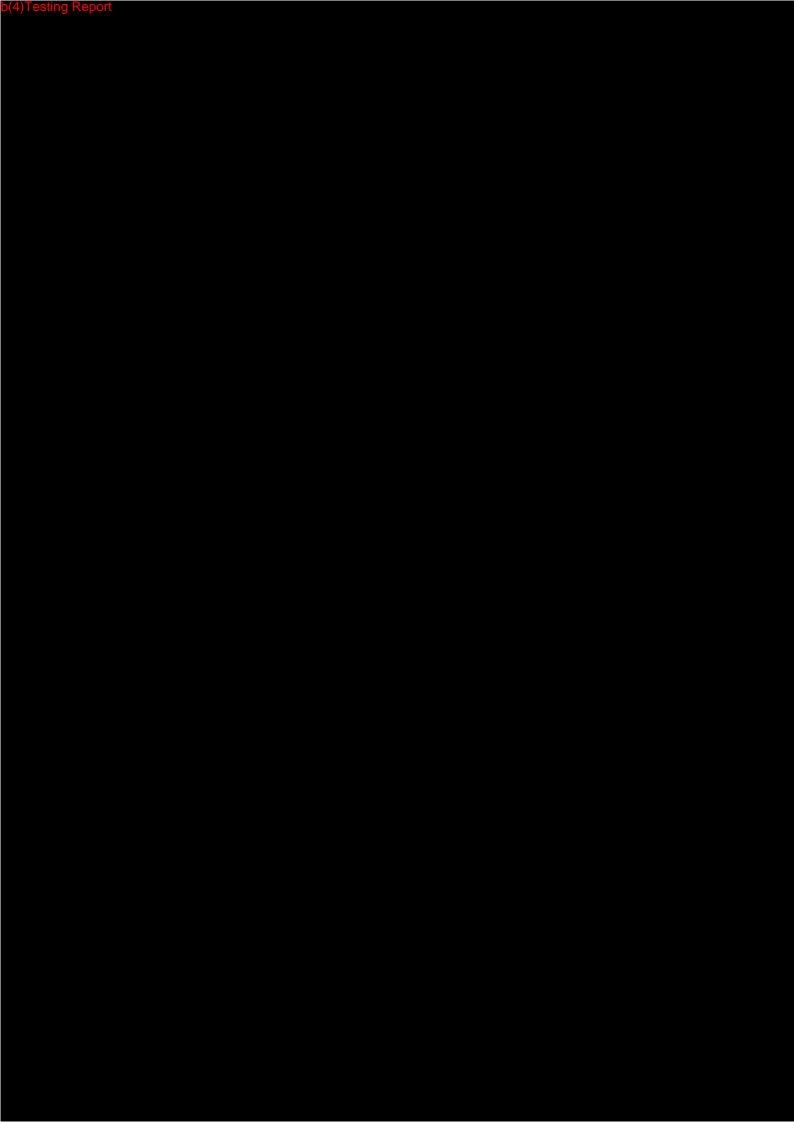




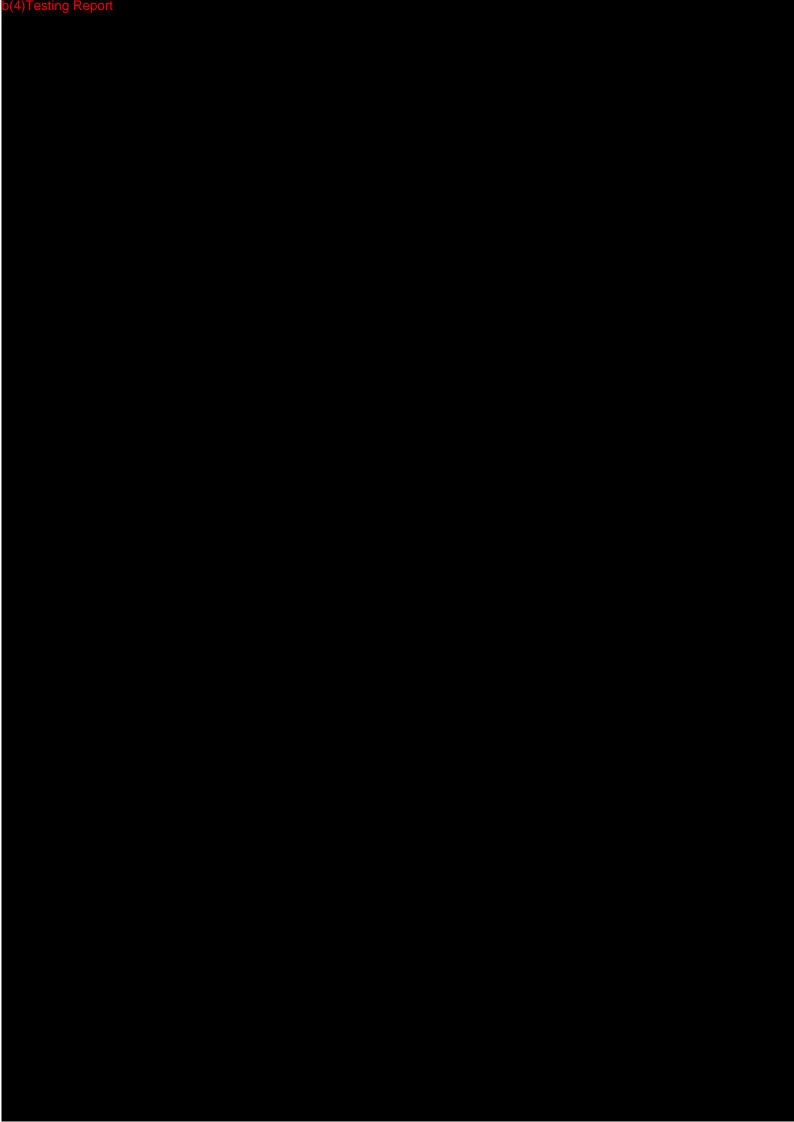






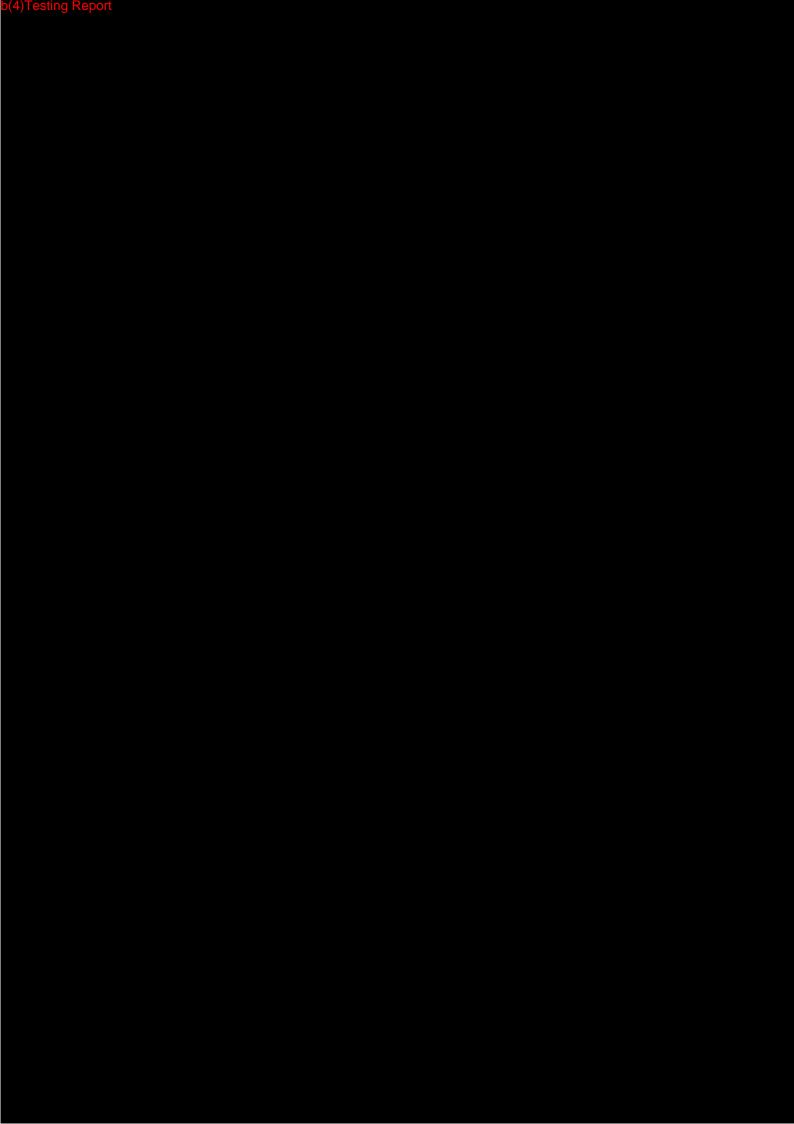


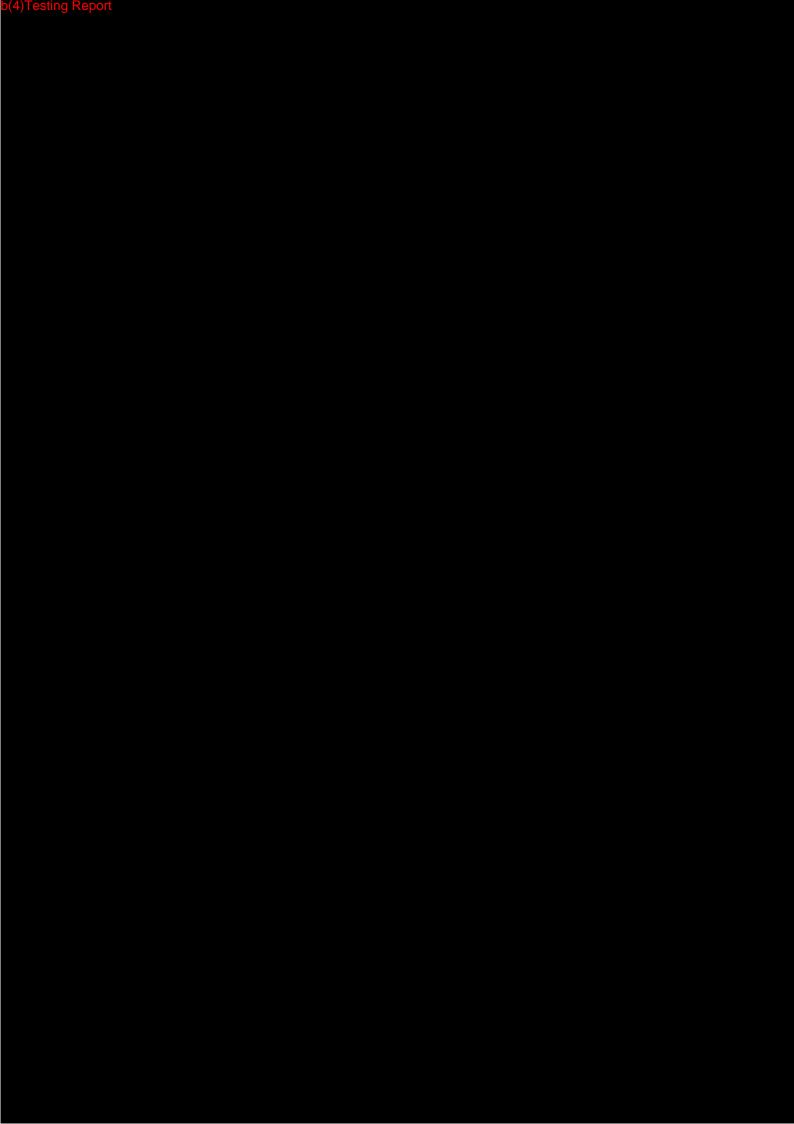


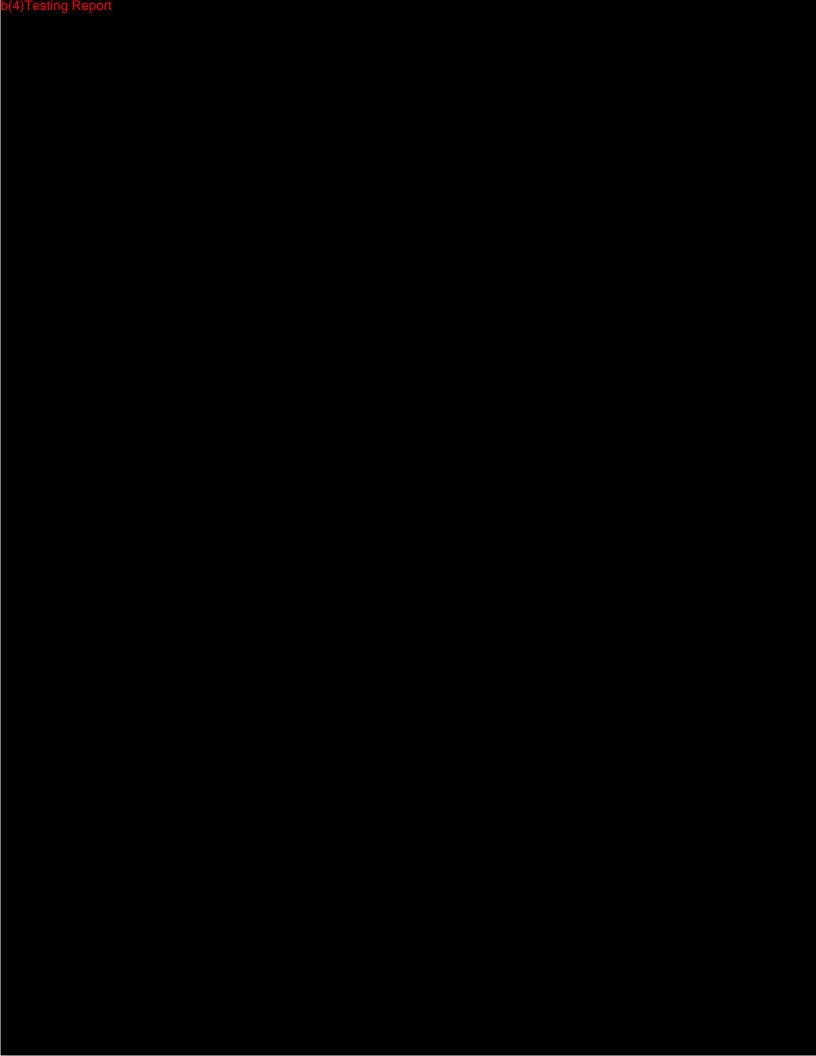


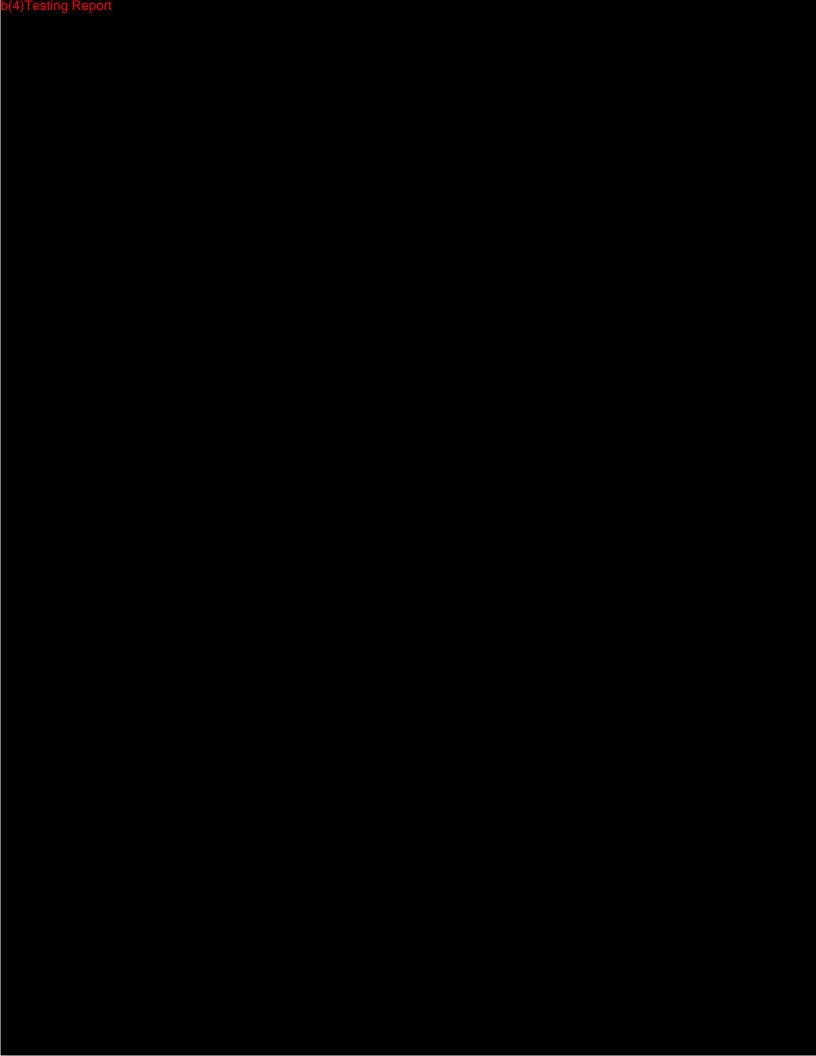


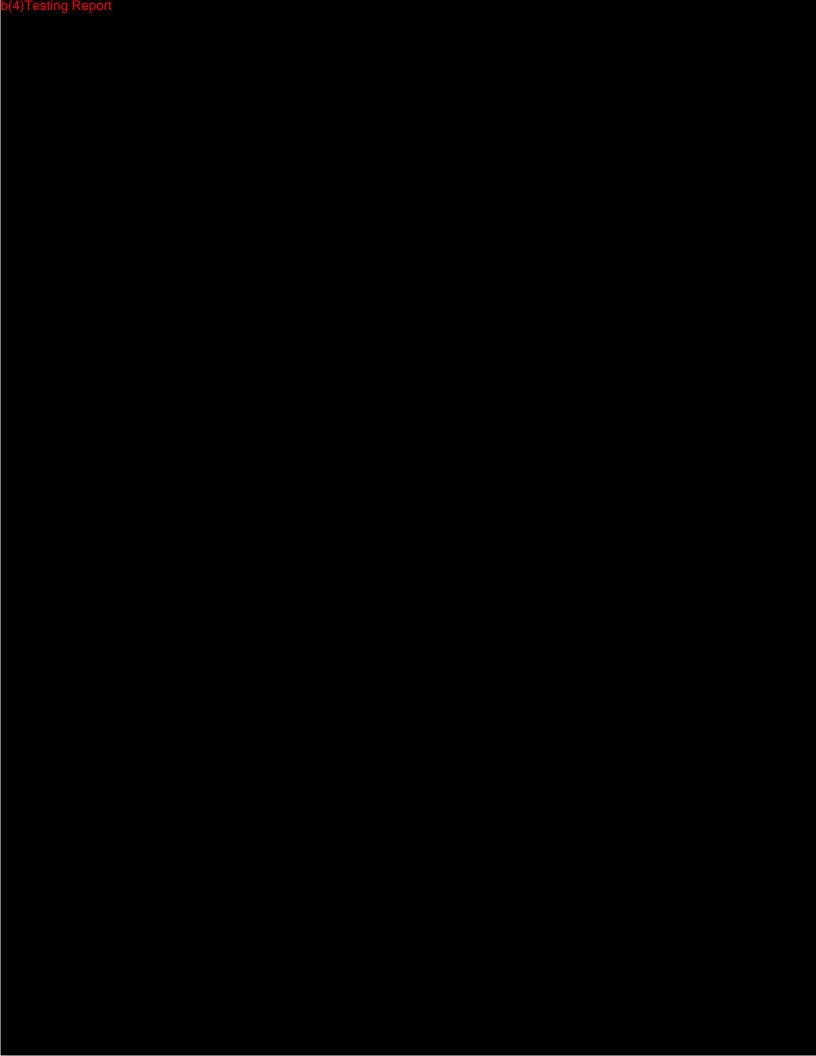
## Annex VII Heavy Metal Test Report

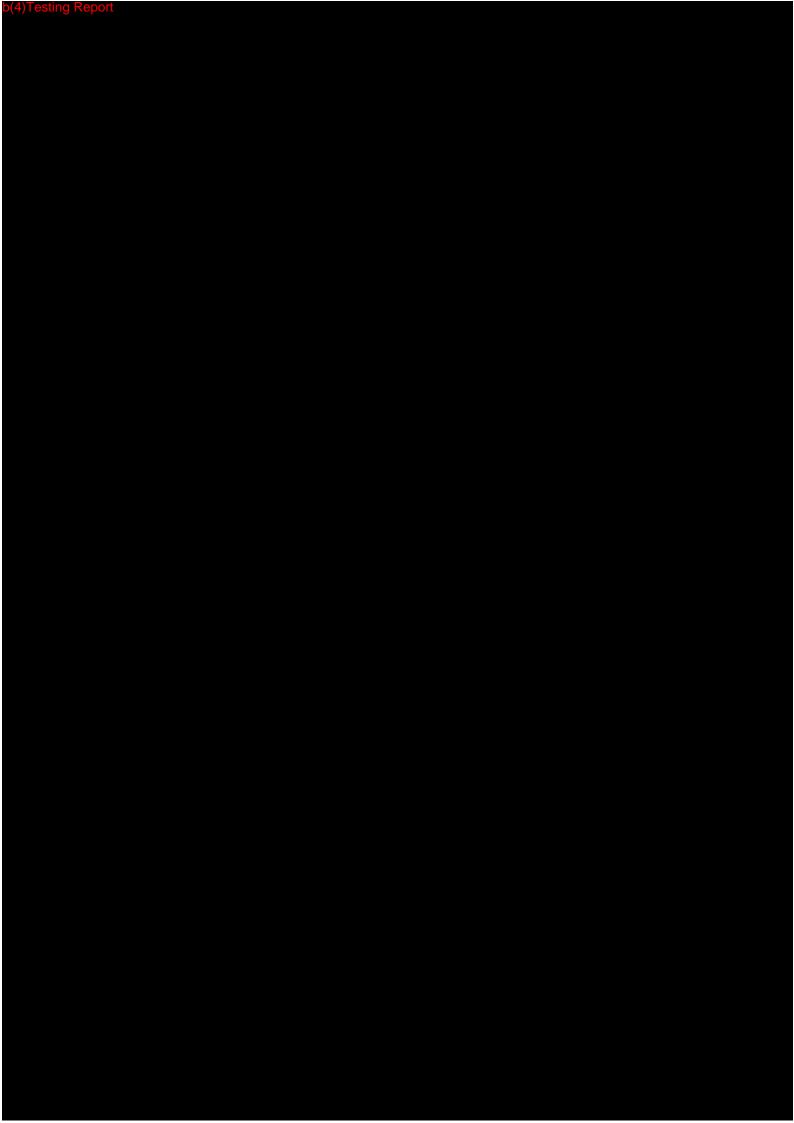


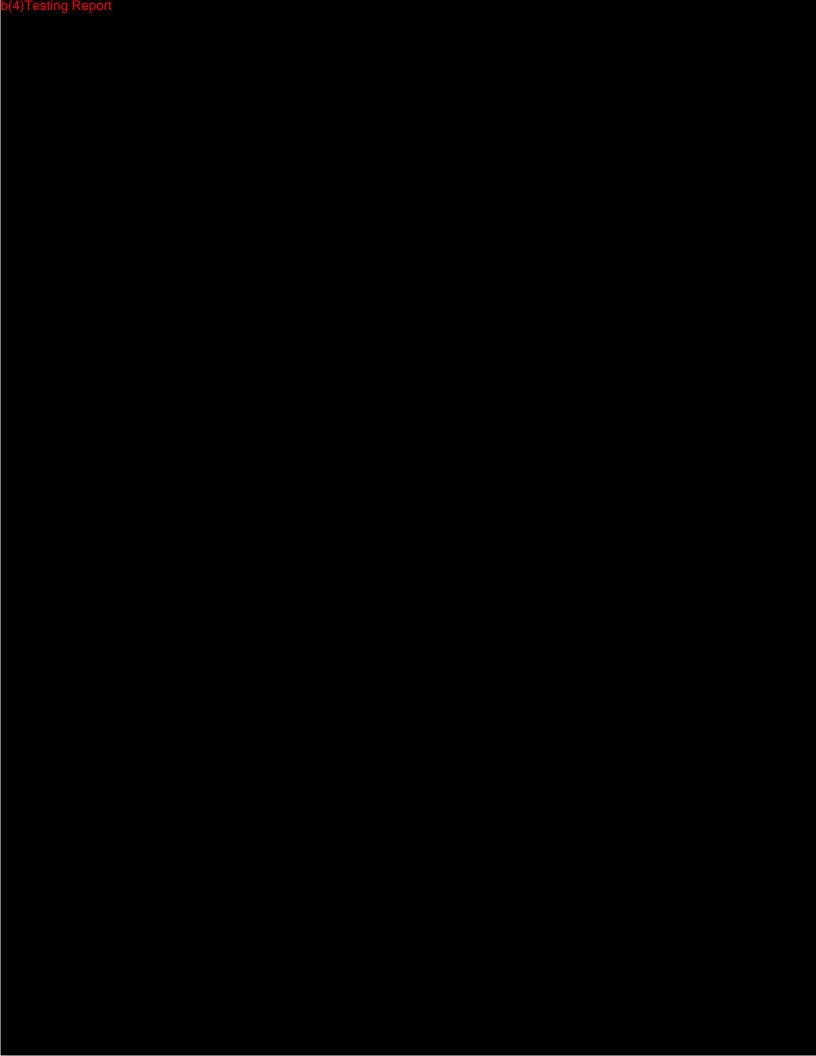


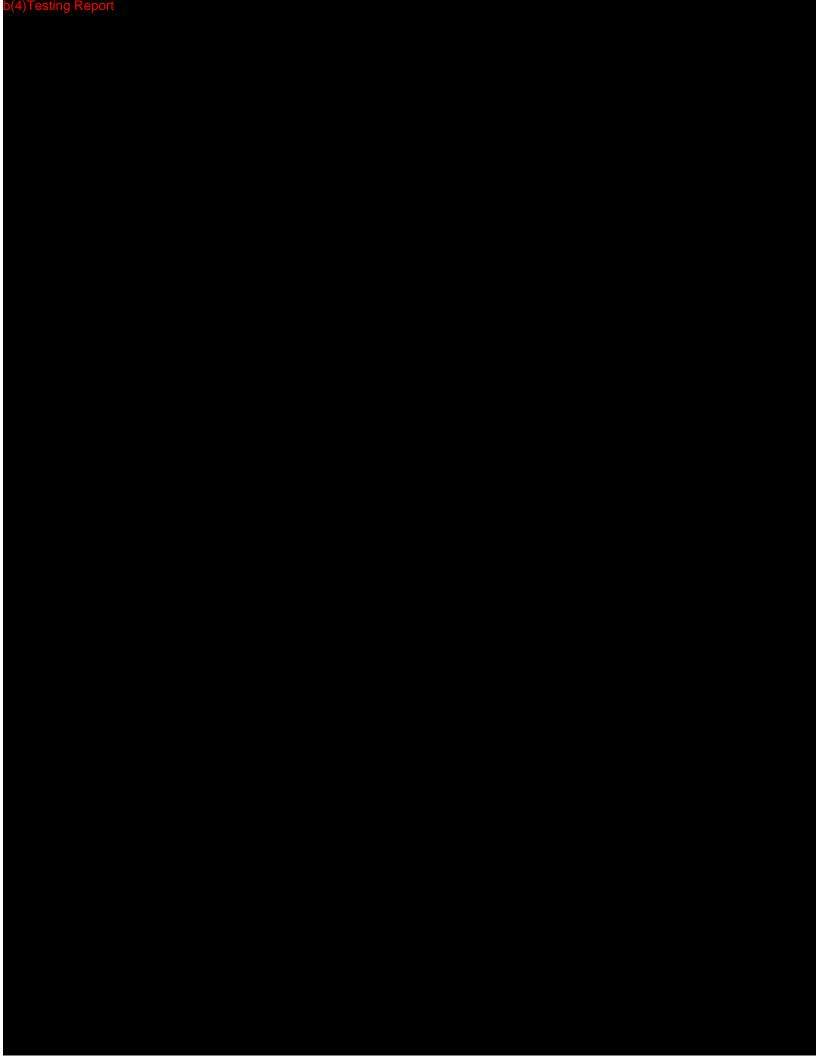


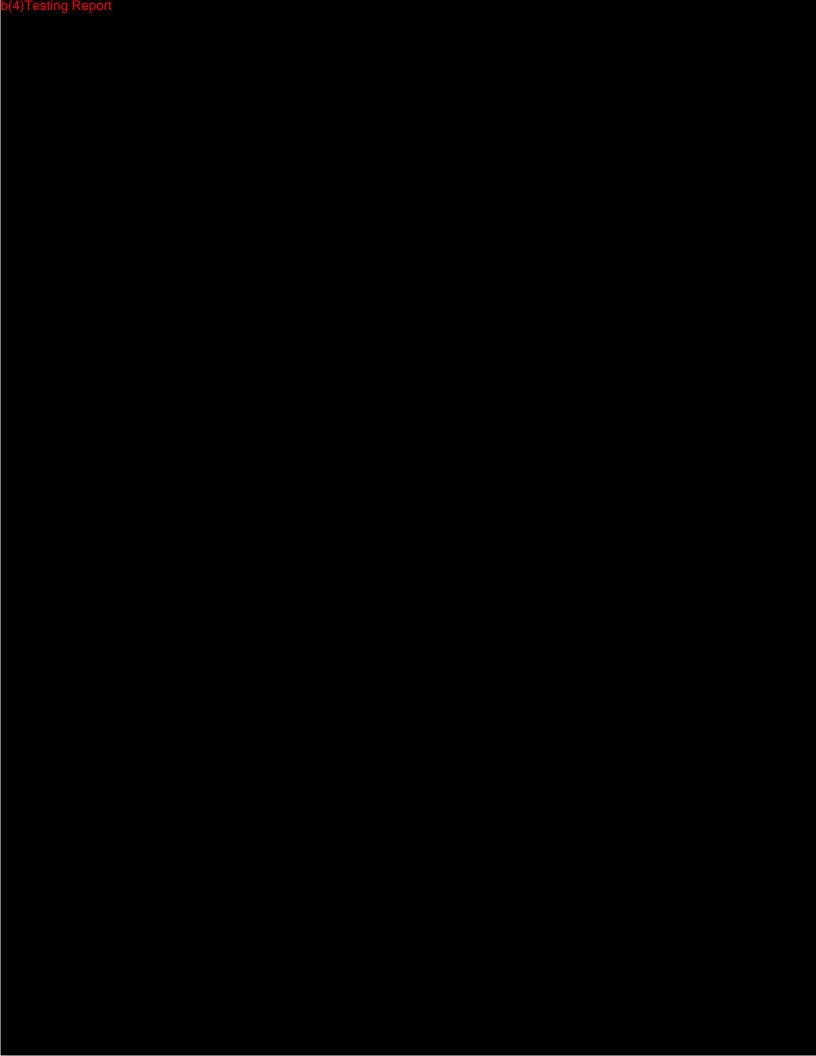


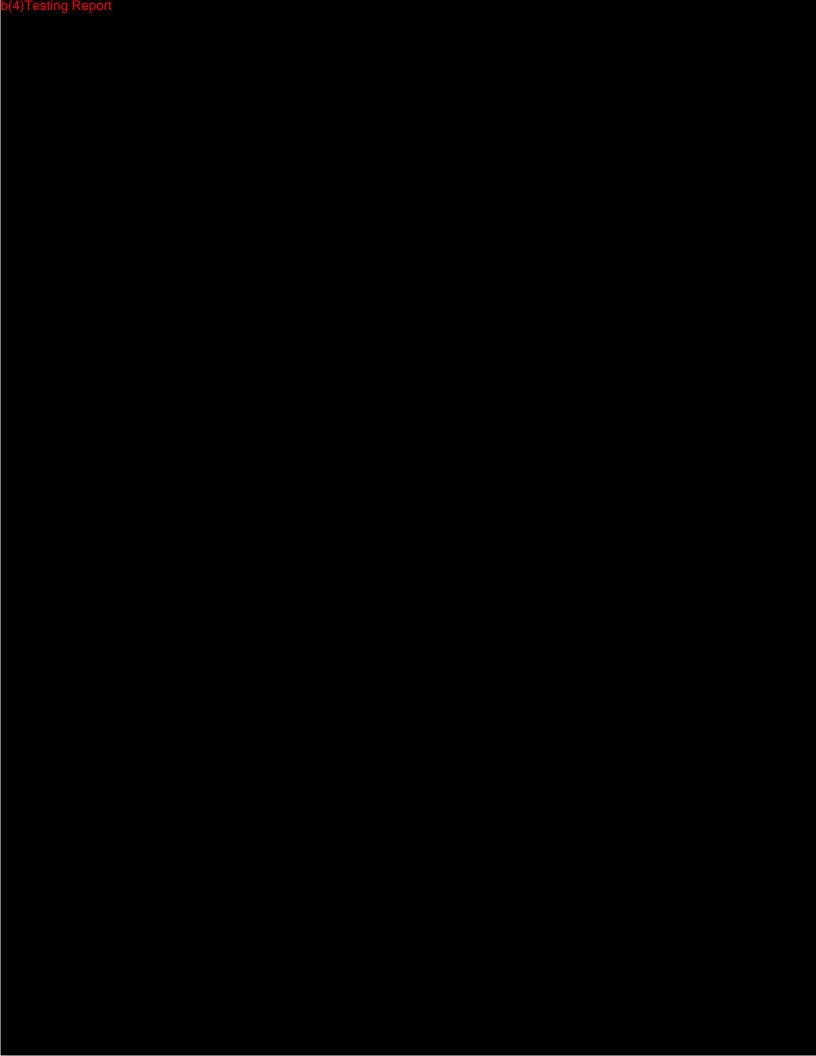


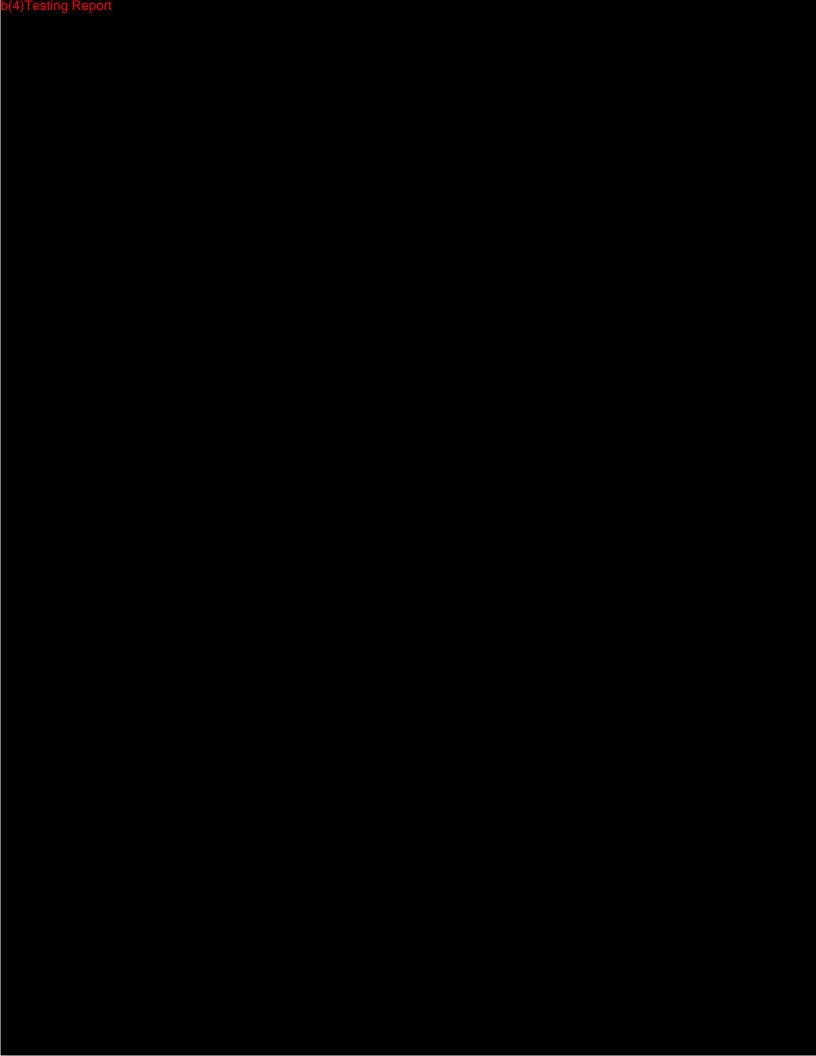


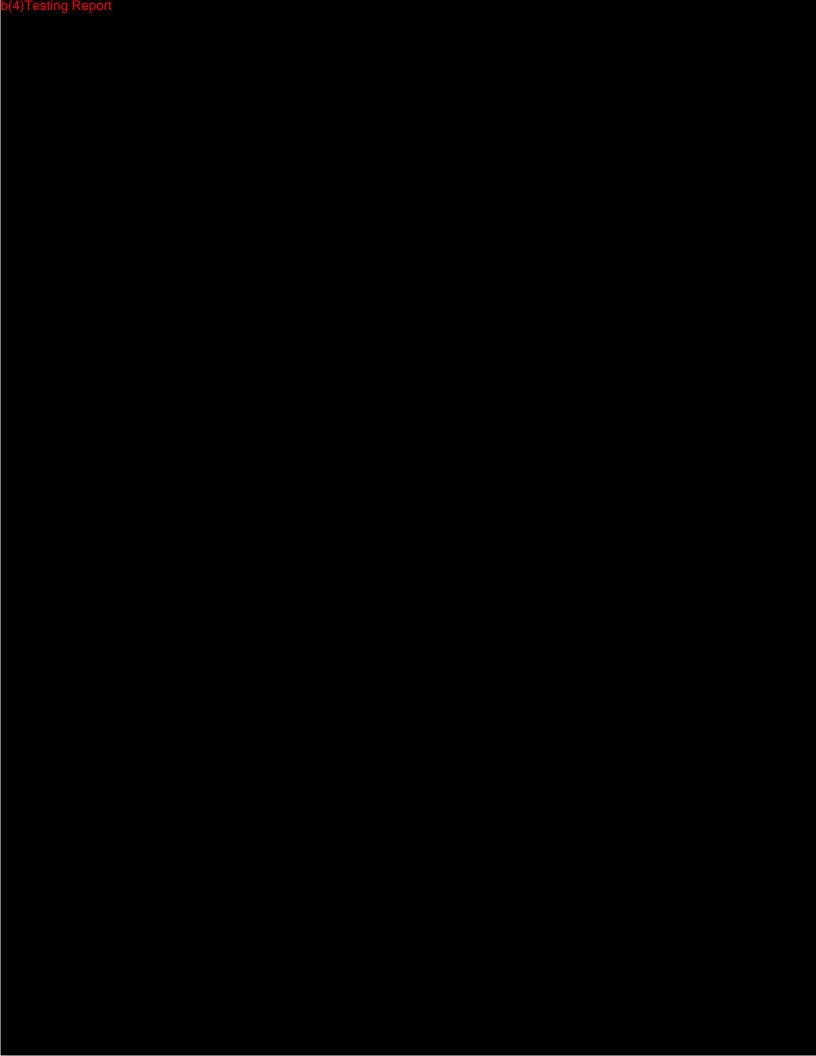


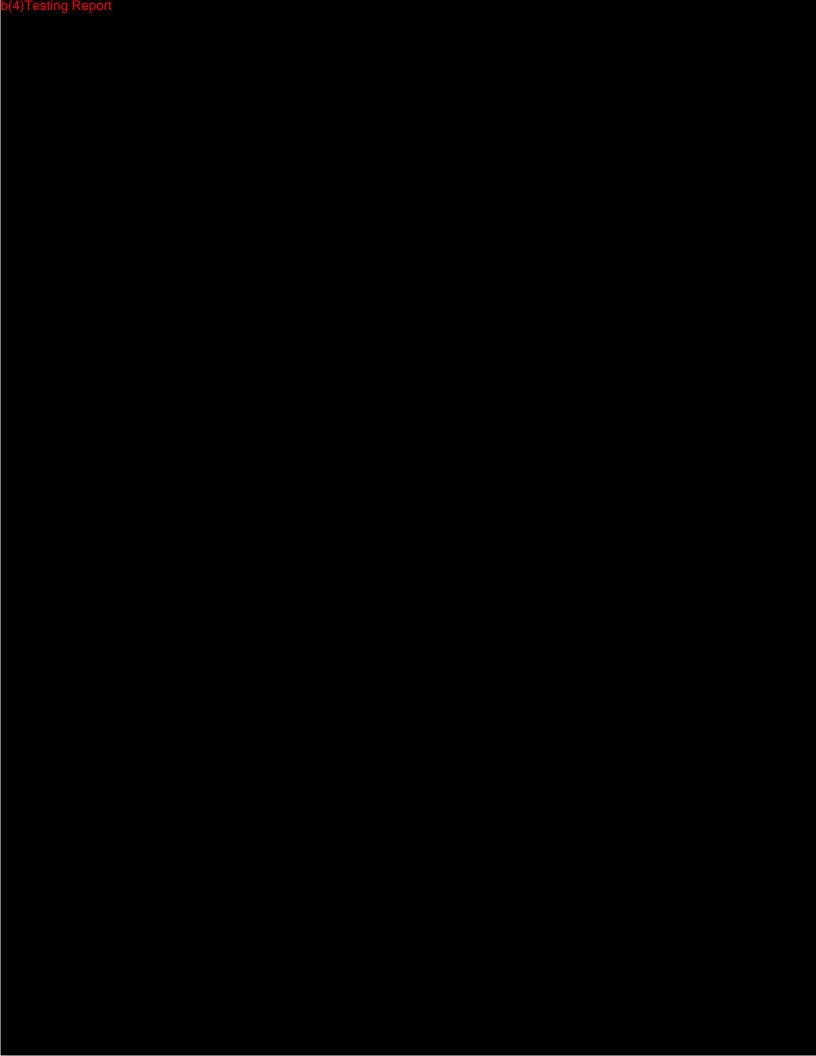


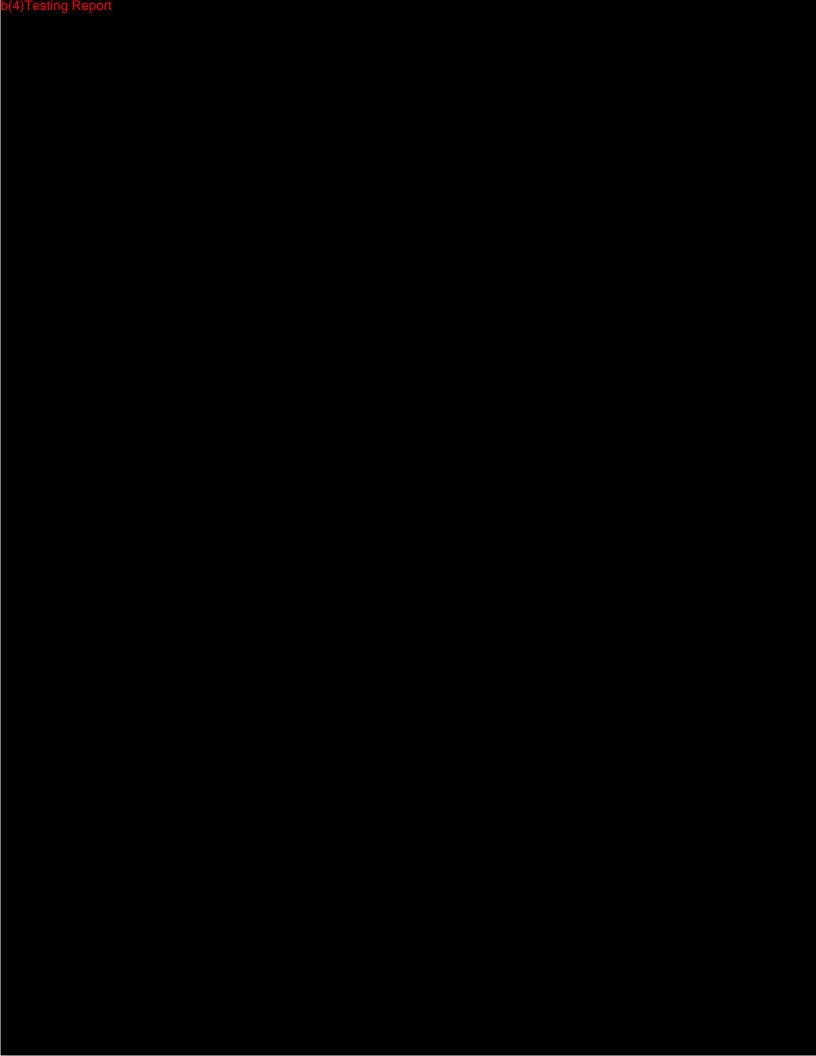


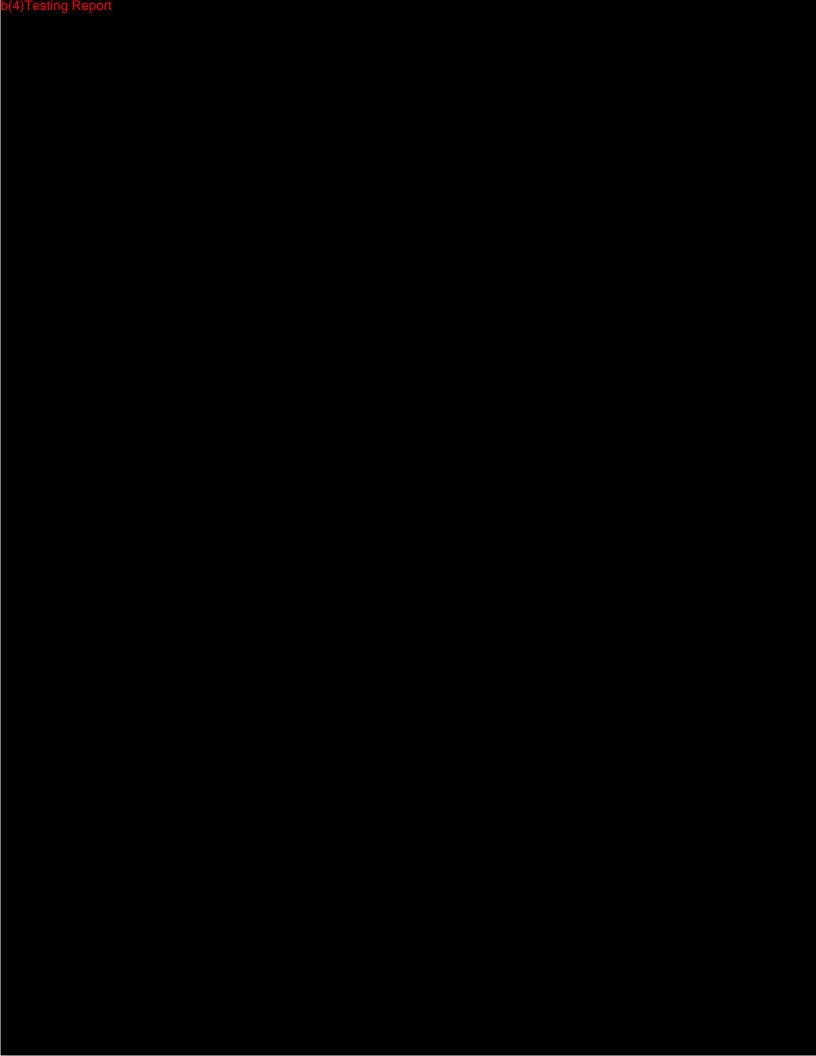


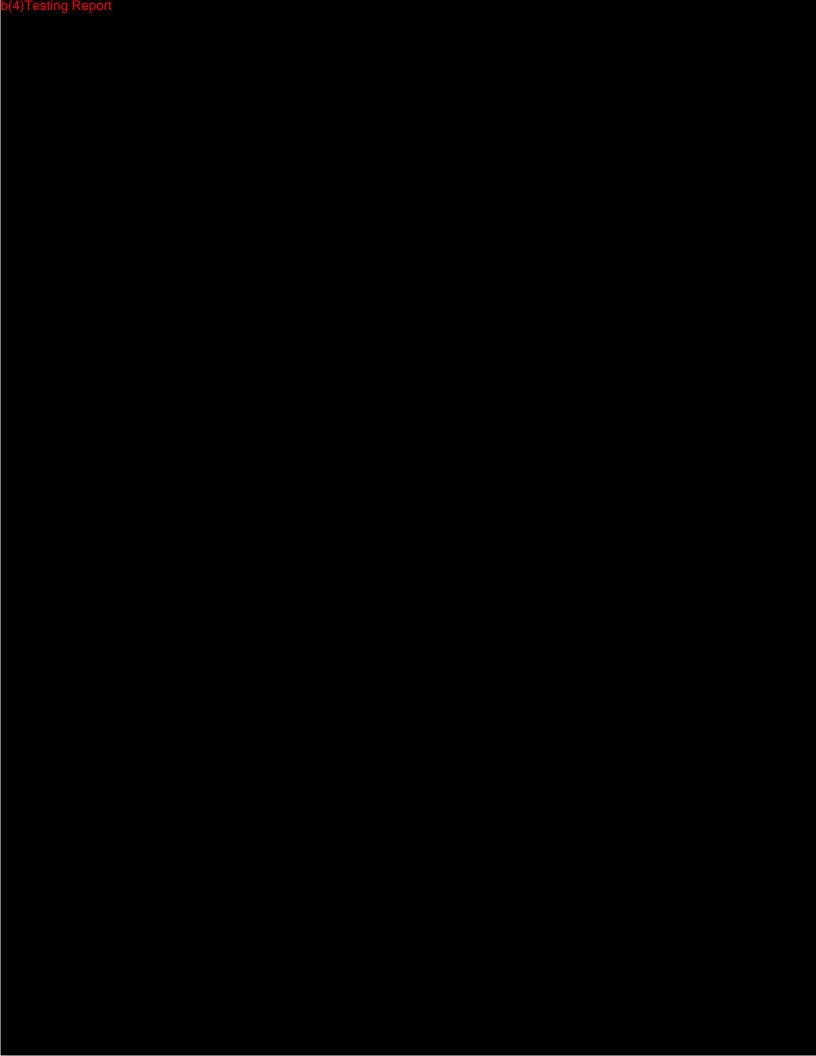


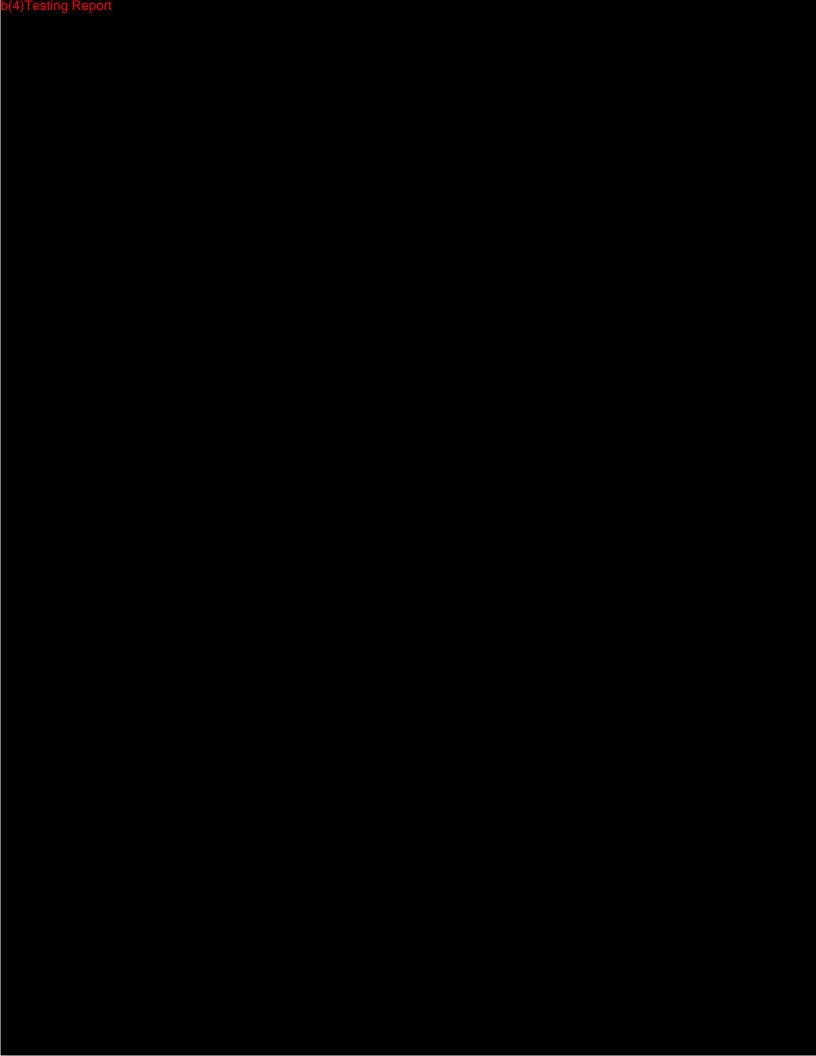


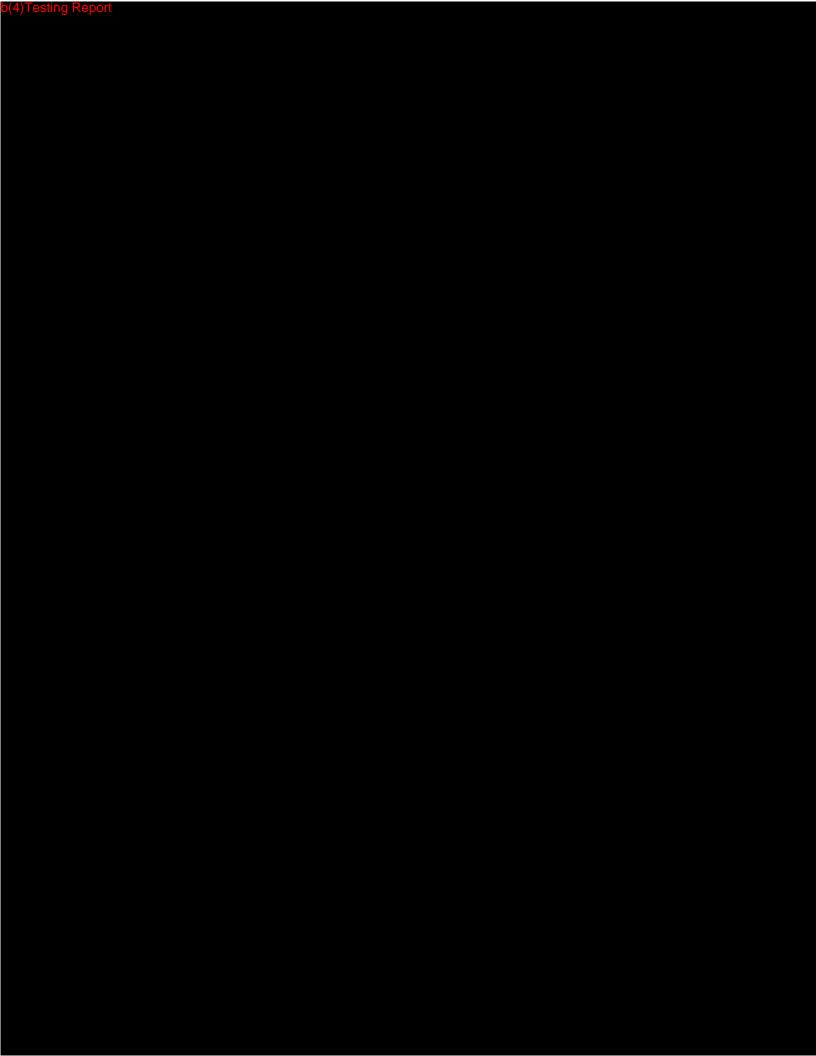


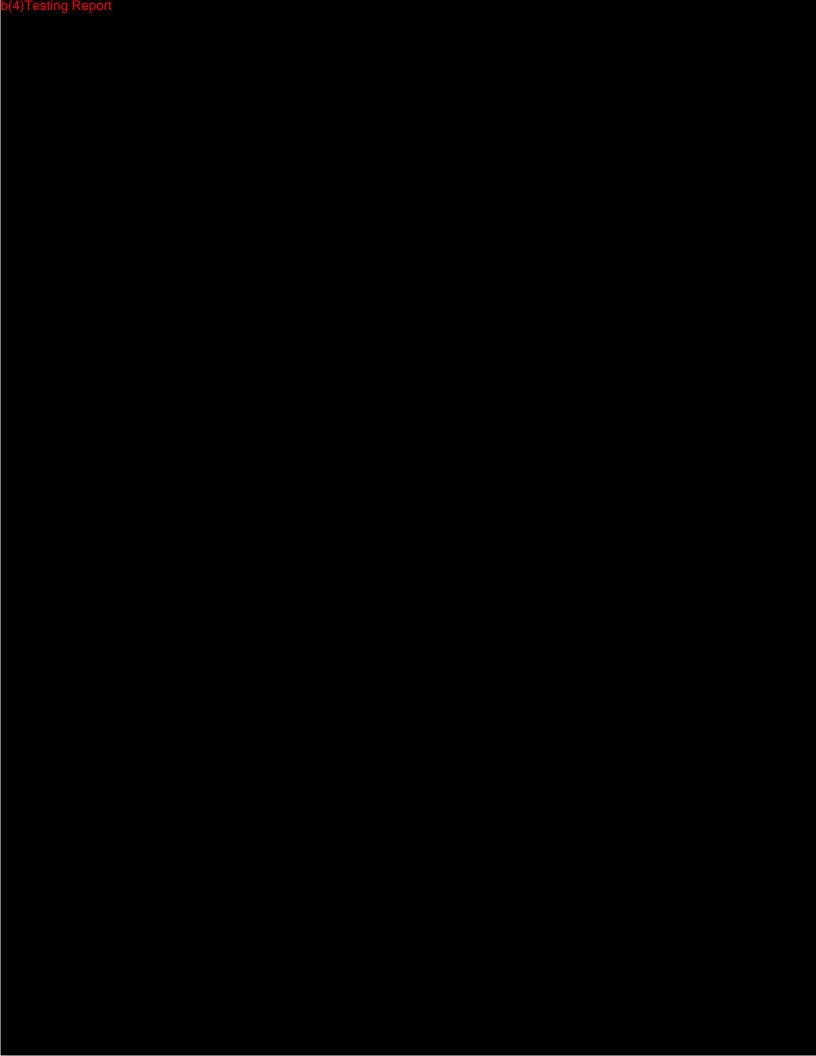


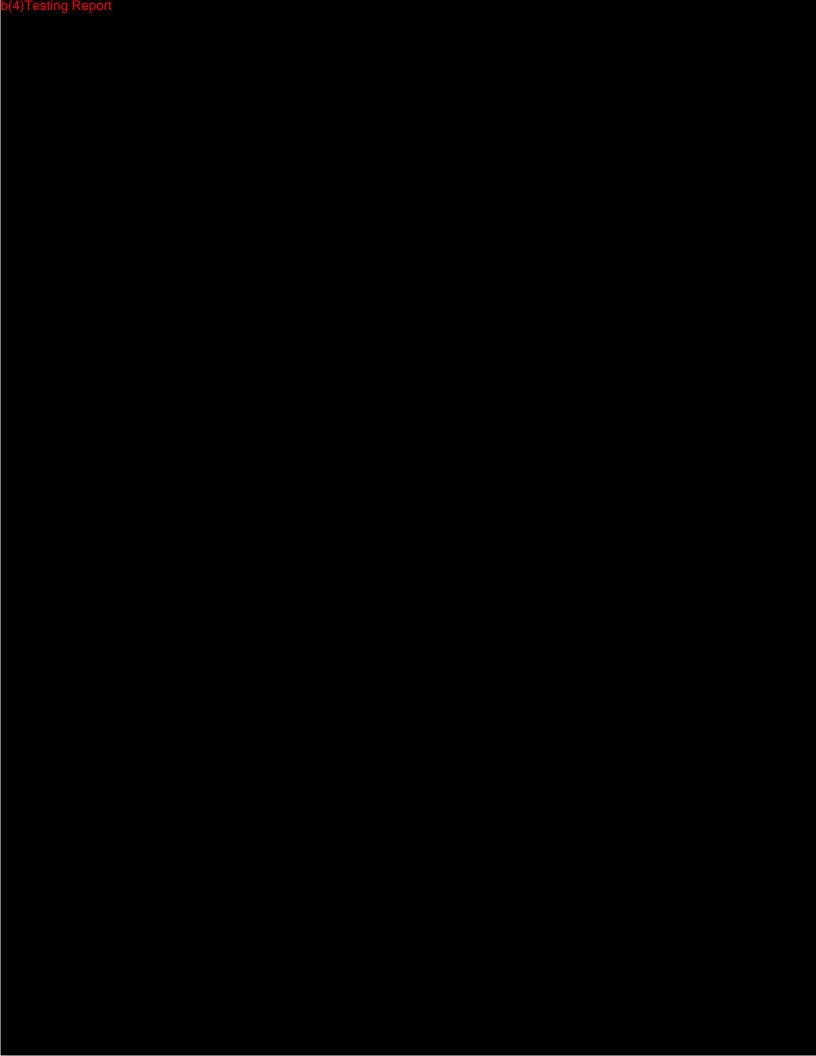


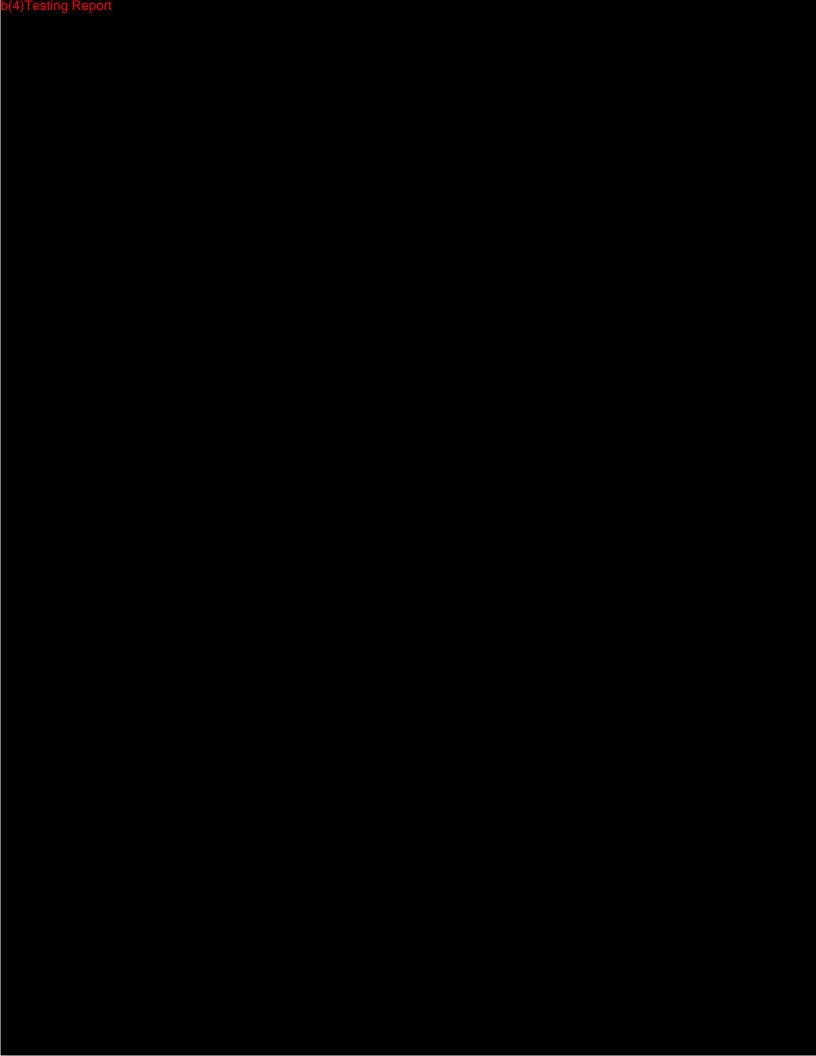


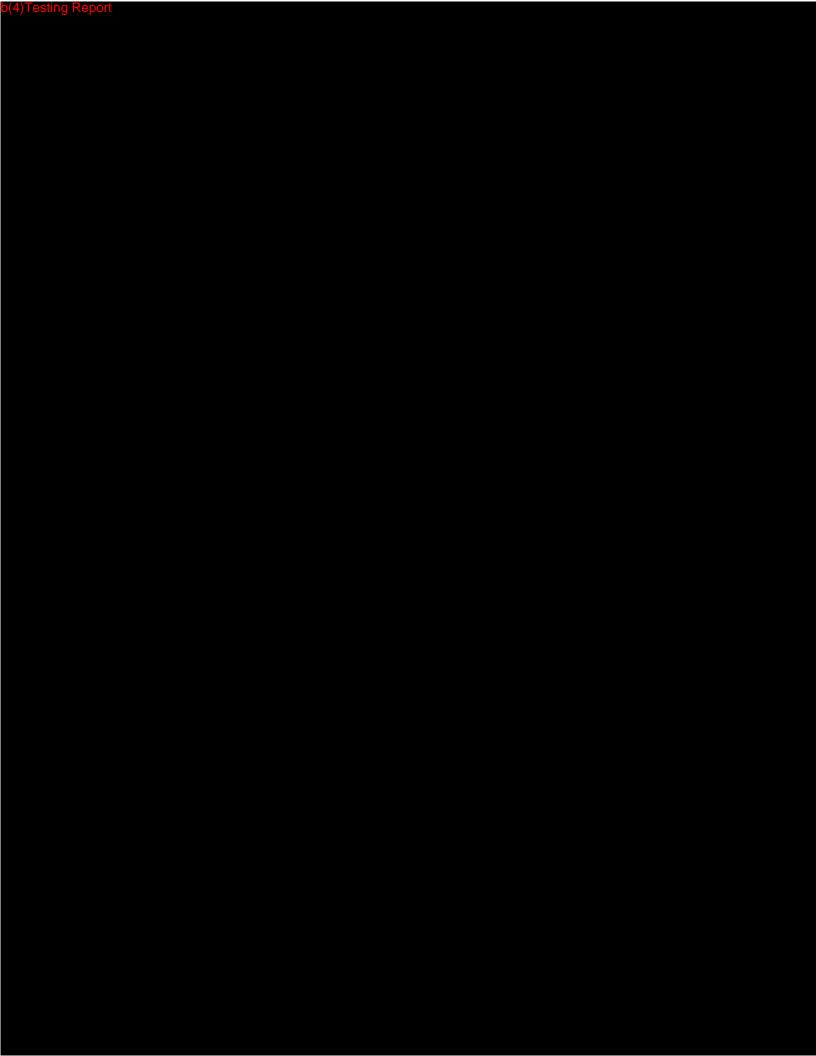


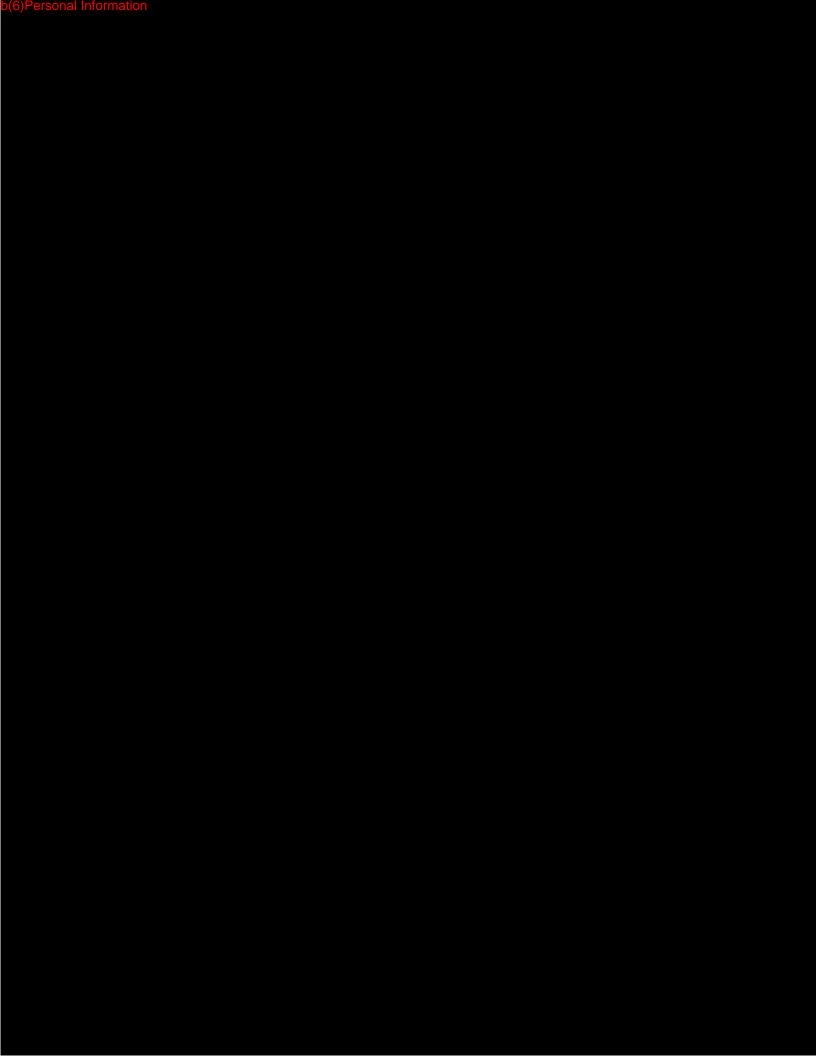


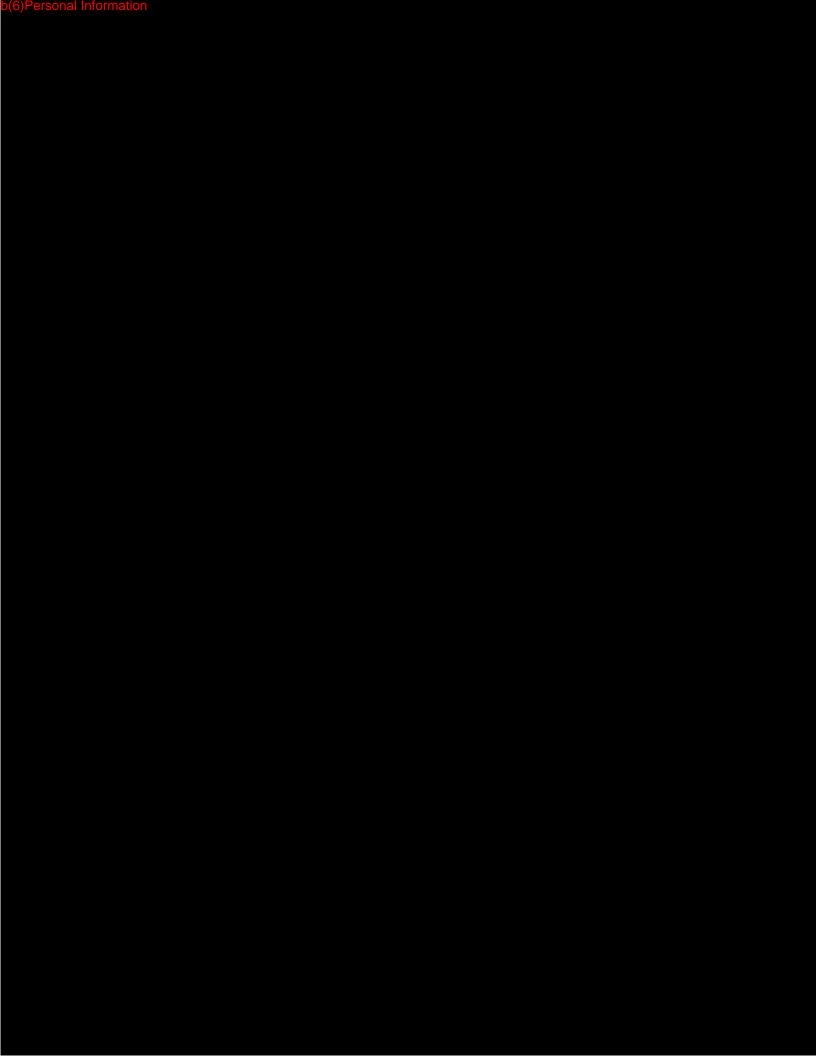


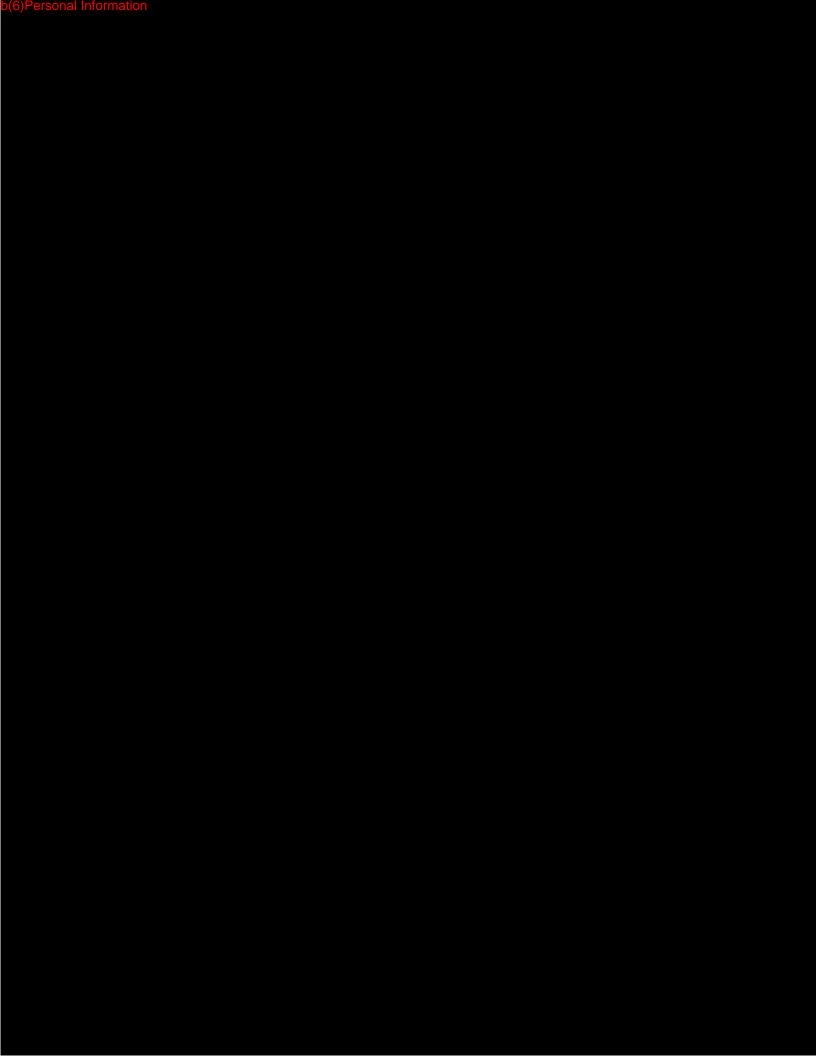


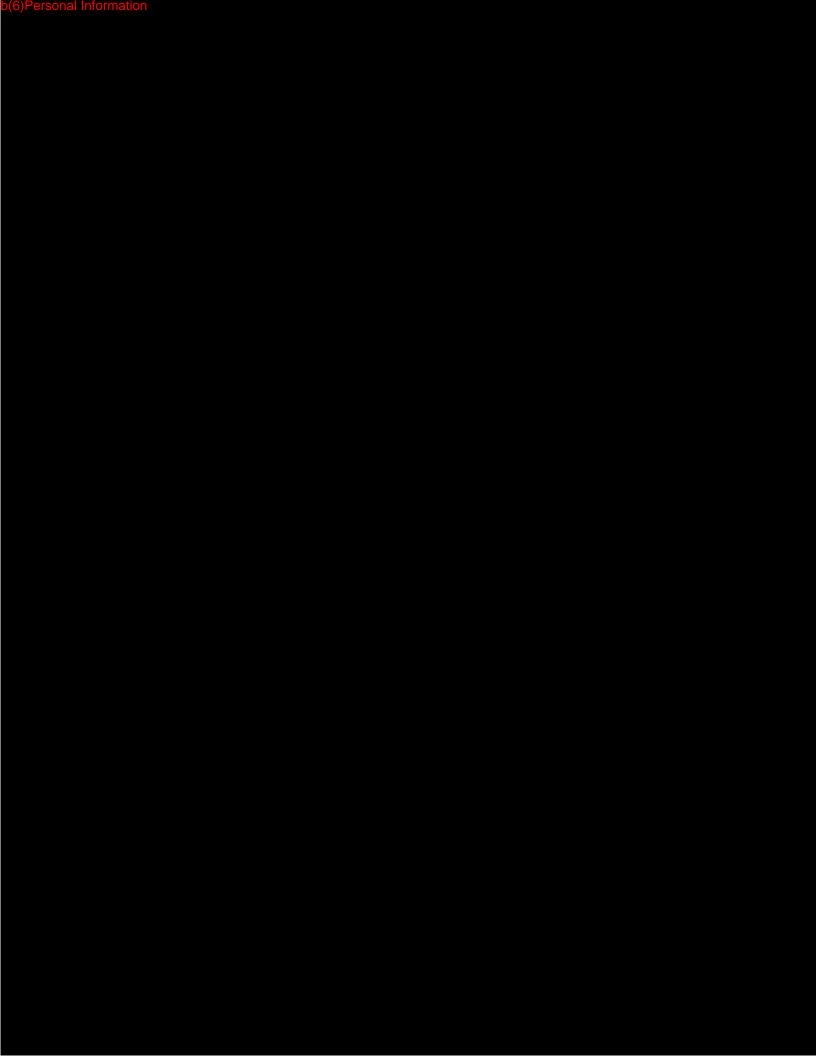


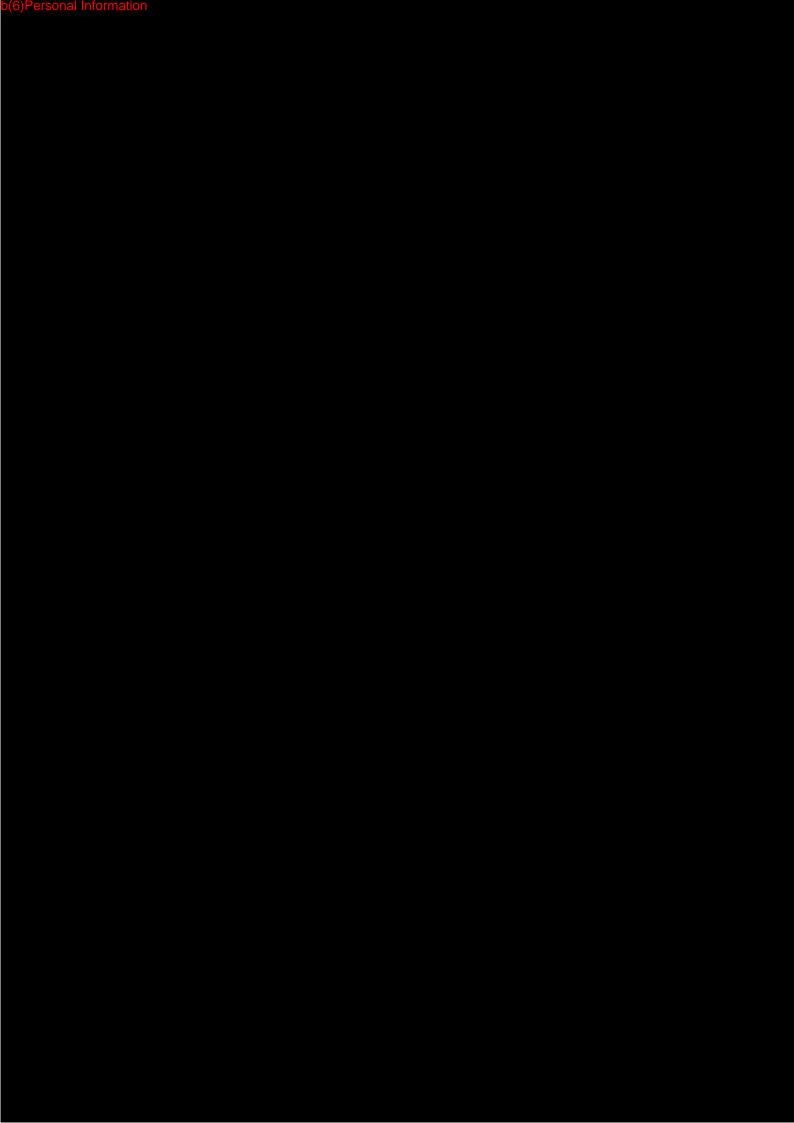












### 康力得生技股份有限公司 CoreLeader Biotech CO., LTD 22102 新北市汐止區新台五路一段100號19樓

Re: K151204

Trade Name: CoreLeader HEMO-Bandage

FDA CDRH DMC K 151204/ 300/

Date: 13th July 2015

JUL 1 6 2015

Food and Drug Administration

Center for Devices and Radiological Health

Received

Document Mail Center WO66-G609

10903 New Hampshire Avenue, Silver Spring, Maryland 20993-0002

# Traditional 510(k): New Device Submission

Device Name:

CoreLeader HEMO-Bandage

Common Name:

Topical wound dressing

K Number:

K151204

Class

Unclassified

Panel

General & Plastic Surgery

510(k) Submitter:

CoreLeader Biotech Co., Ltd.

19F, No. 100, Sec. 1, Xintai 5th Rd., Xizhi Dist.,

New Taipei City, Taiwan, R.O.C. 22102

Phone: +886-2-26968880

Fax: +886-2-26968882

Contact Person:

Ya-Wen Kuo

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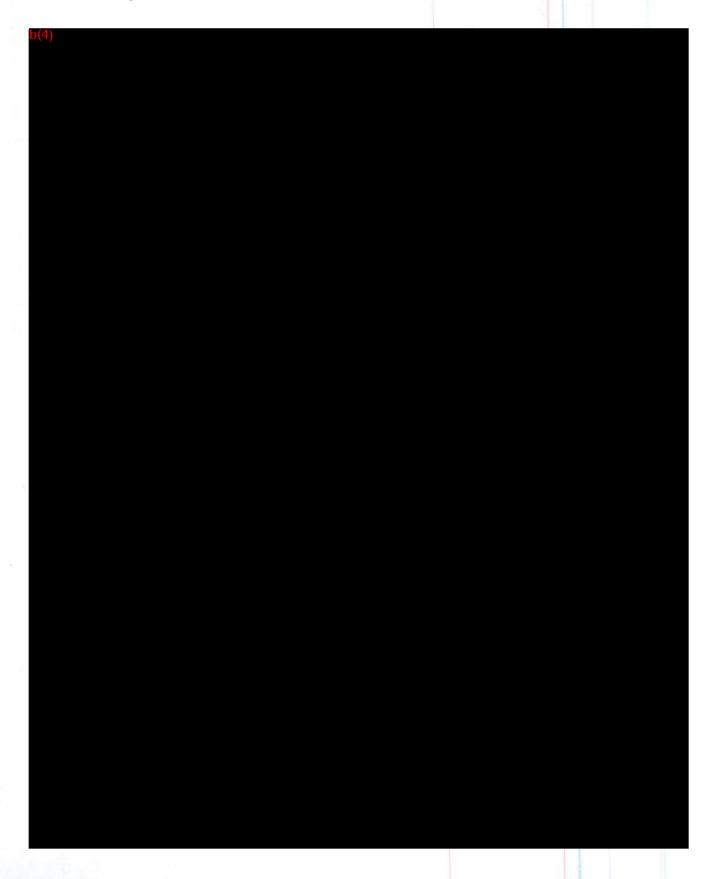
E-mail: ywk@coreleaderbio.com

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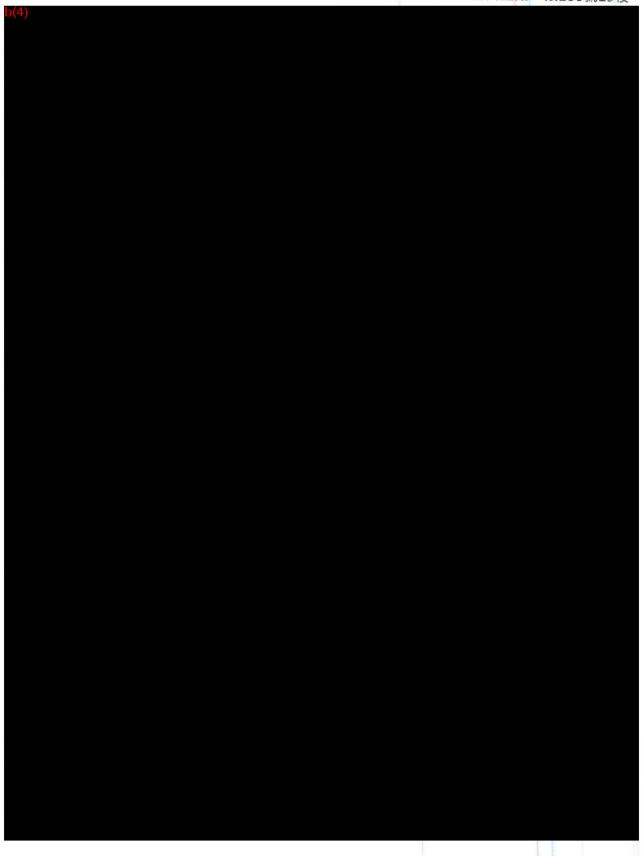
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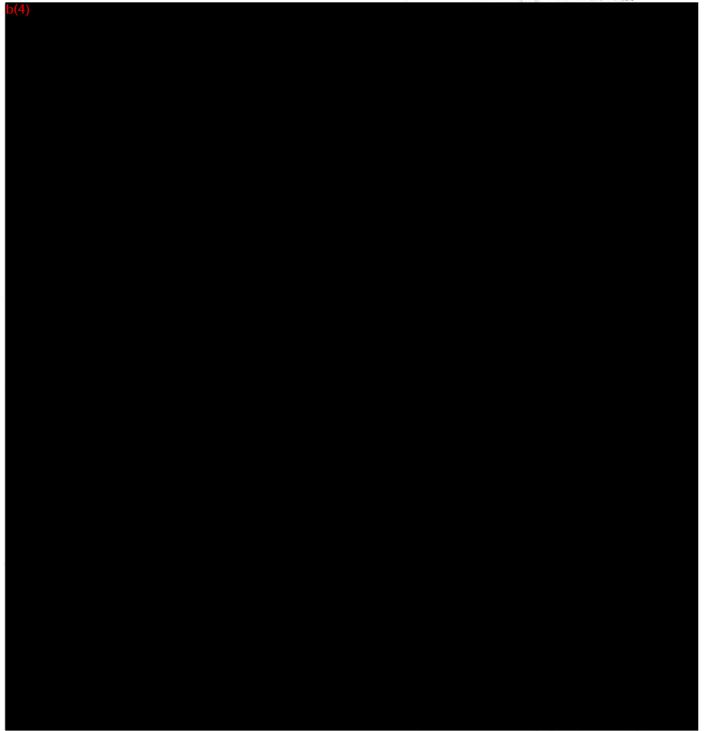
康力得生技股份有限公司 CoreLeader Biotech CO., LTD 22102新北市汐止區新台五路一段100號19樓

Dear Dr. Arepalli,



康力得生技股份有限公司 CoreLeader Biotech CO., LTD 22102 新北市汐止區新台五路一段100號19樓





Sincerely,

Ya-Wen Kuo

Manager, Regulatory Affair

CoreLeader Biotech Co., Ltd

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#### Re: K151204

#### Trade Name: CoreLeader HEMO-Bandage

Date: 13<sup>th</sup> July 2015

Food and Drug Administration

Center for Devices and Radiological Health

Document Mail Center WO66-G609

10903 New Hampshire Avenue, Silver Spring, Maryland 20993-0002

#### **Traditional 510(k): New Device Submission**

Device Name: CoreLeader HEMO-Bandage

Common Name: Topical wound dressing

K Number: K151204

Class Unclassified

Panel General & Plastic Surgery

510(k) Submitter: CoreLeader Biotech Co., Ltd.

19F, No. 100, Sec. 1, Xintai 5th Rd., Xizhi Dist.,

New Taipei City, Taiwan, R.O.C. 22102

Phone: +886-2-26968880

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Contact Person: Ya-Wen Kuo

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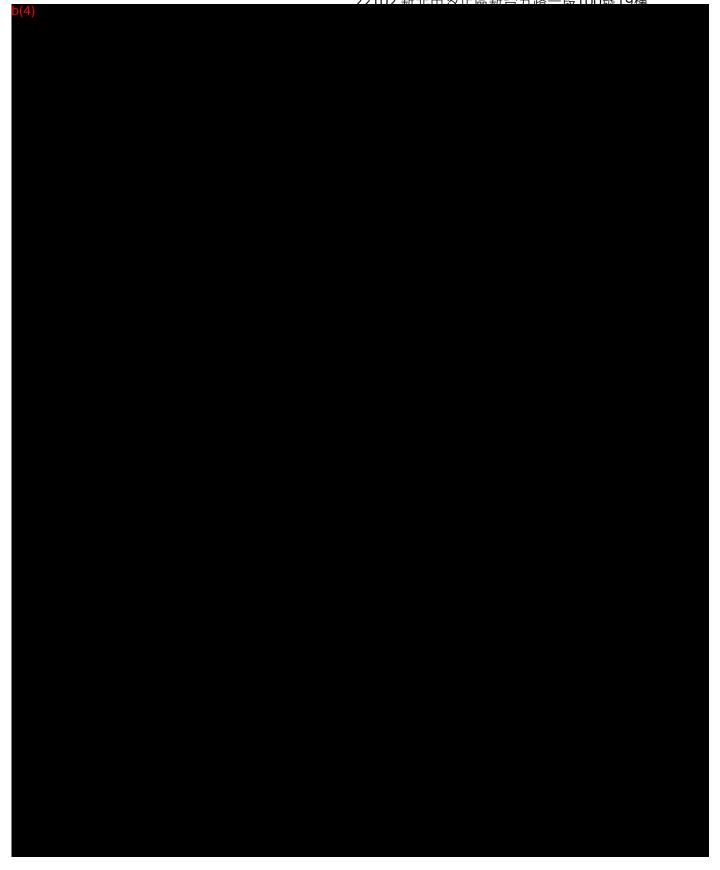
E-mail: ywk@coreleaderbio.com

eCopy Statement: The eCopy is an exact duplicate of the paper copy.



Dear Dr. Arepalli,

b(4)		





Sincerely,

Ya-Wen Kuo

Manager, Regulatory Affair CoreLeader Biotech Co., Ltd

康力得生技股份有限公司 CoreLeader Biotech CO., LTD 22102 新北市汐止區新台五路一段100號19樓

# Chapter 6 Truthful and Accurate Statement

#### Chapter 6 Truthful and Accurate Statement

#### **Truthful and Accurate Statement**

I certify that, in my capacity as a Director of Regulatory and R&D of CoreLeader Biotech Co., Ltd, I believe, to the best of my knowledge, that all data and information submitted in the premarket notification are truthful and accurate and that no material fact has been omitted.

Ya-Wen Kuo

Director, Regulatory and R&D

Ca-War Caro

CoreLeader Biotech Co., Ltd

Ya-Wen Kuo

Typed Name

2015/07/14

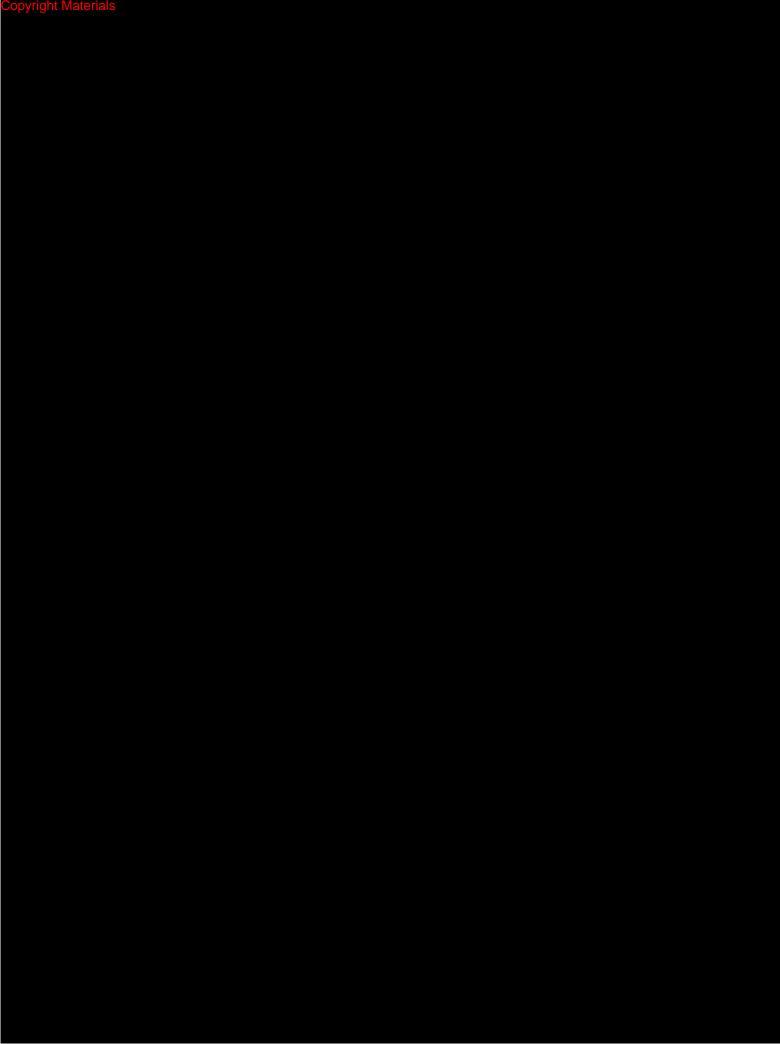
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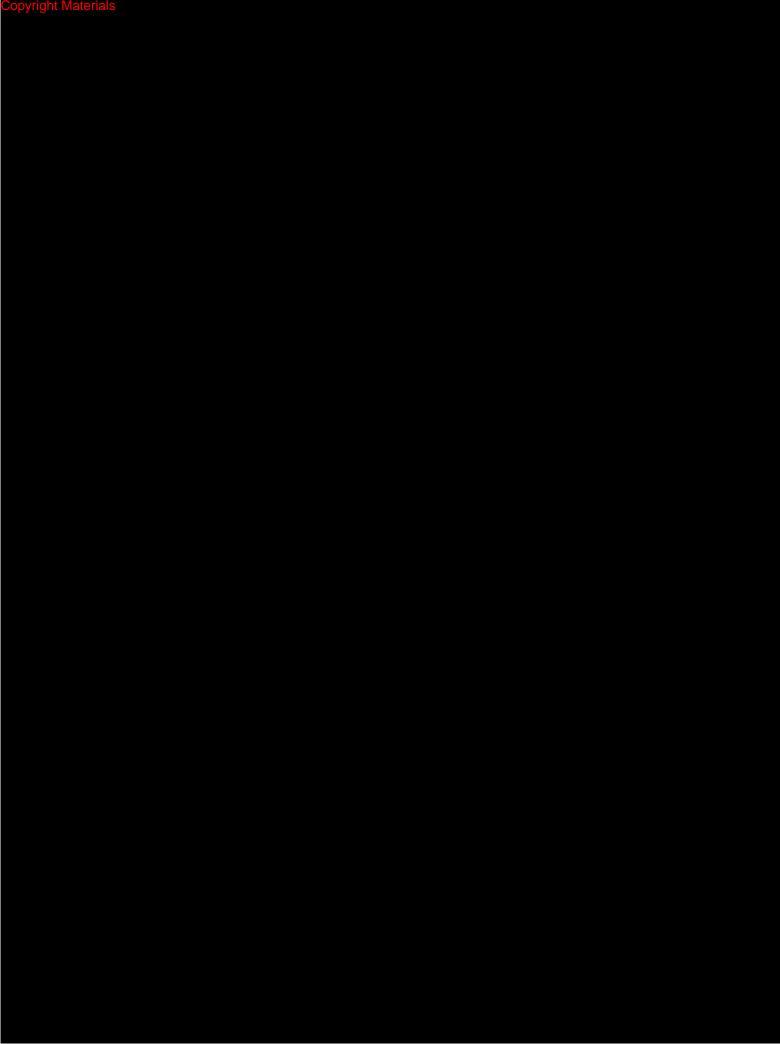
K151204

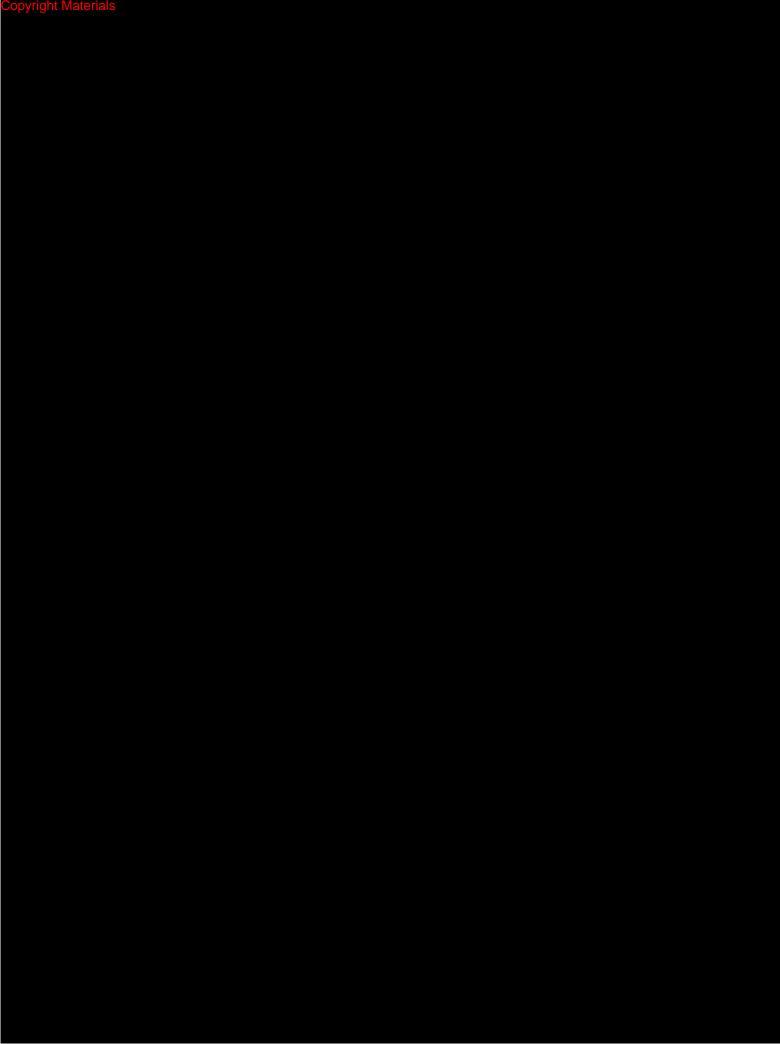
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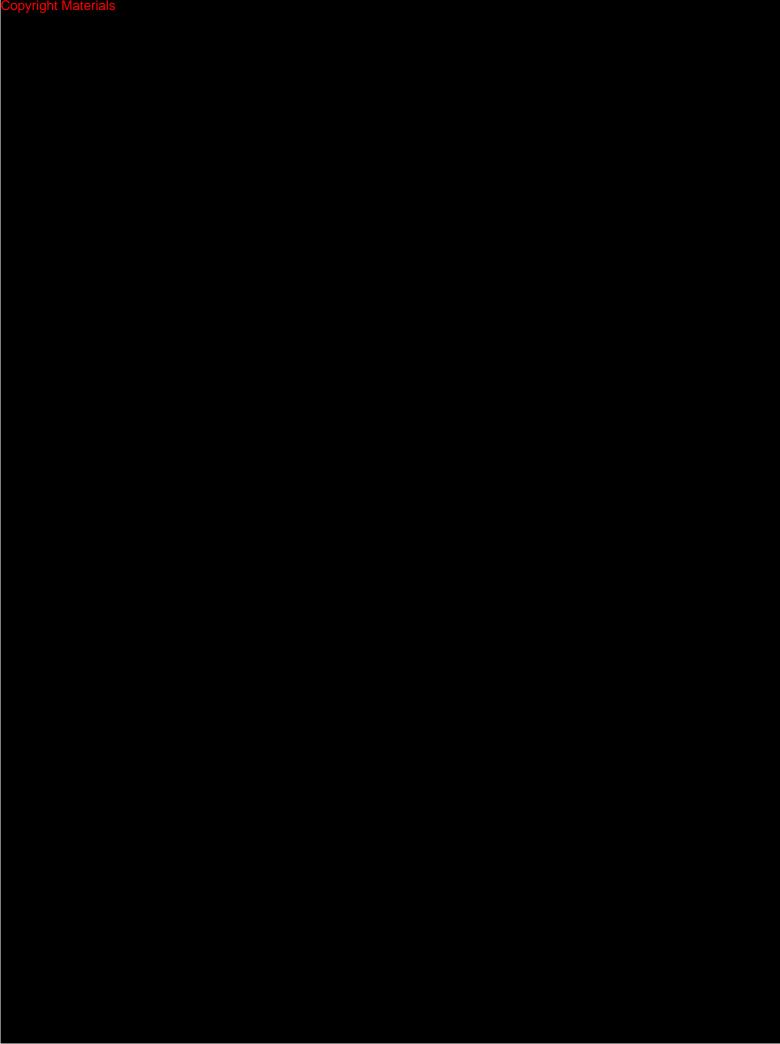
\*For a new submission, leave the 510(k) number blank.

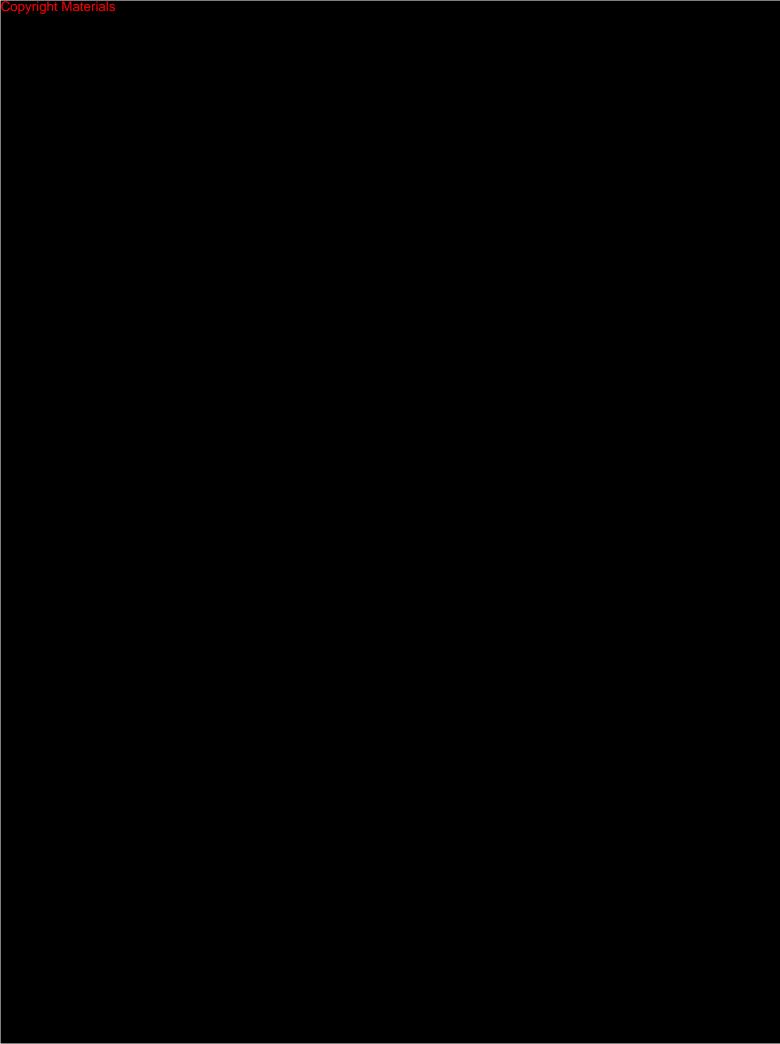
Must be signed by a responsible person of the firm required to submit the premarket notification [e.g., not a consultant for the 510(k) submitter].

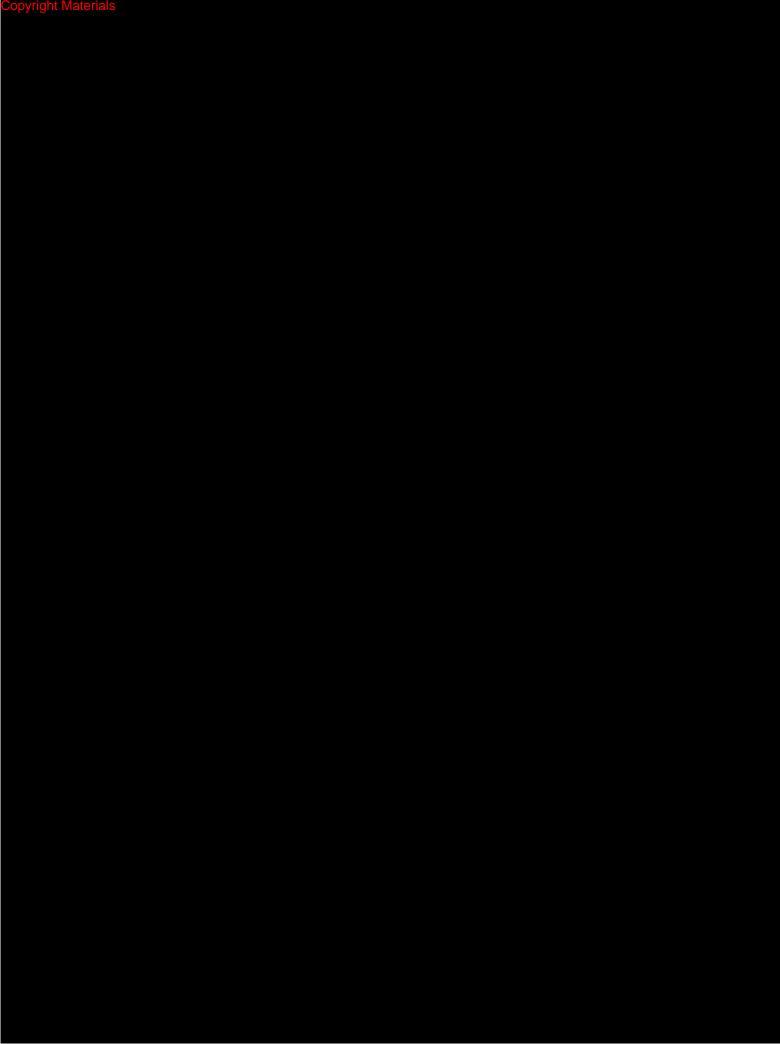


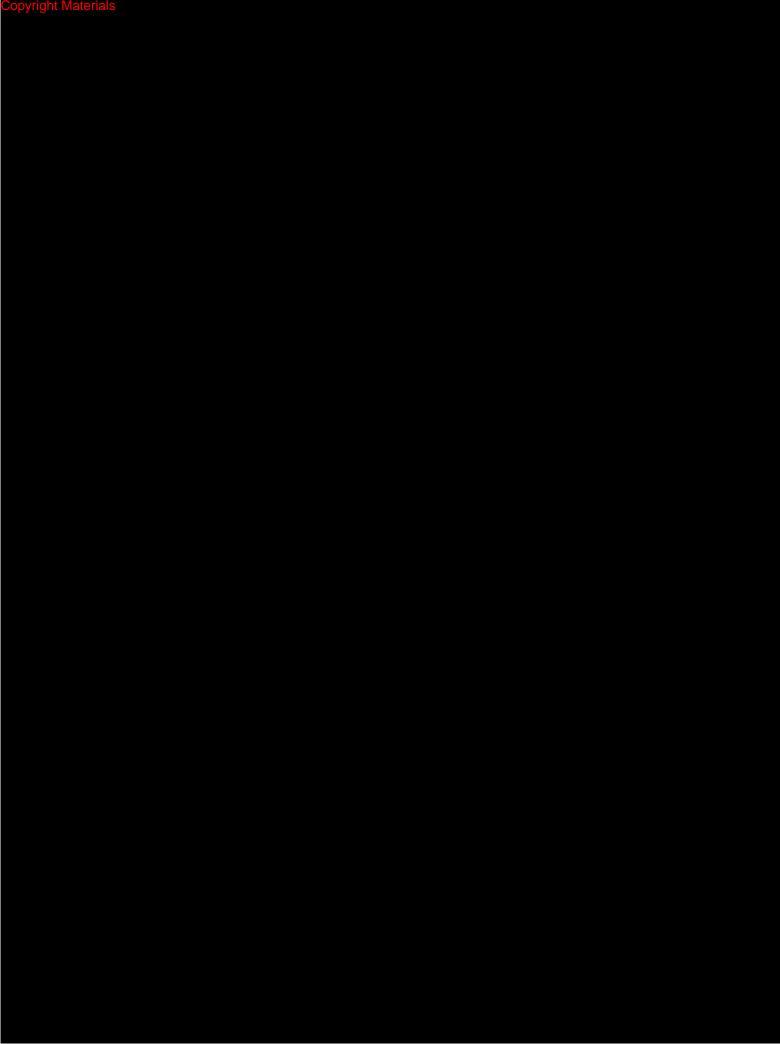


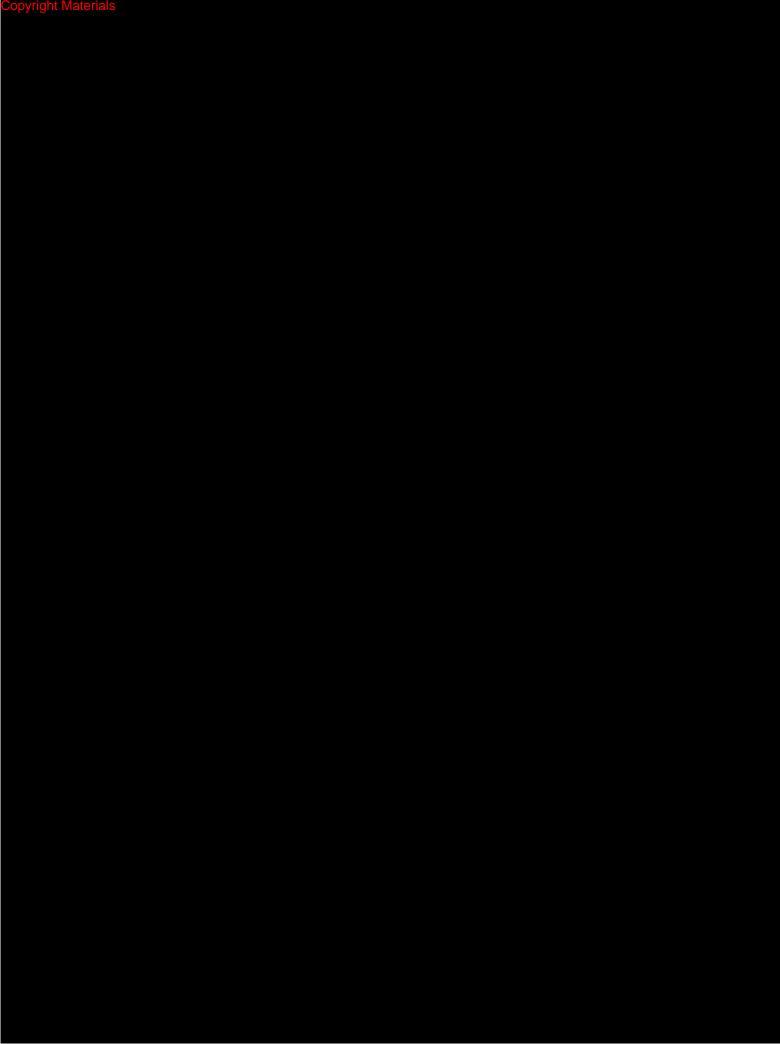


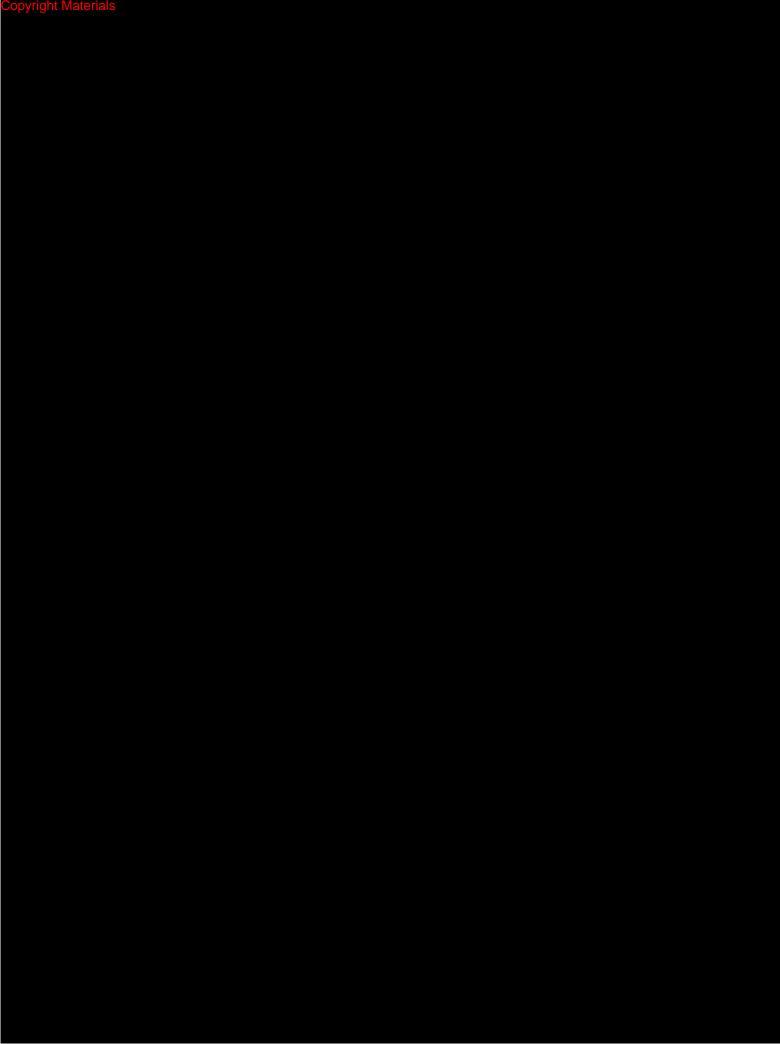


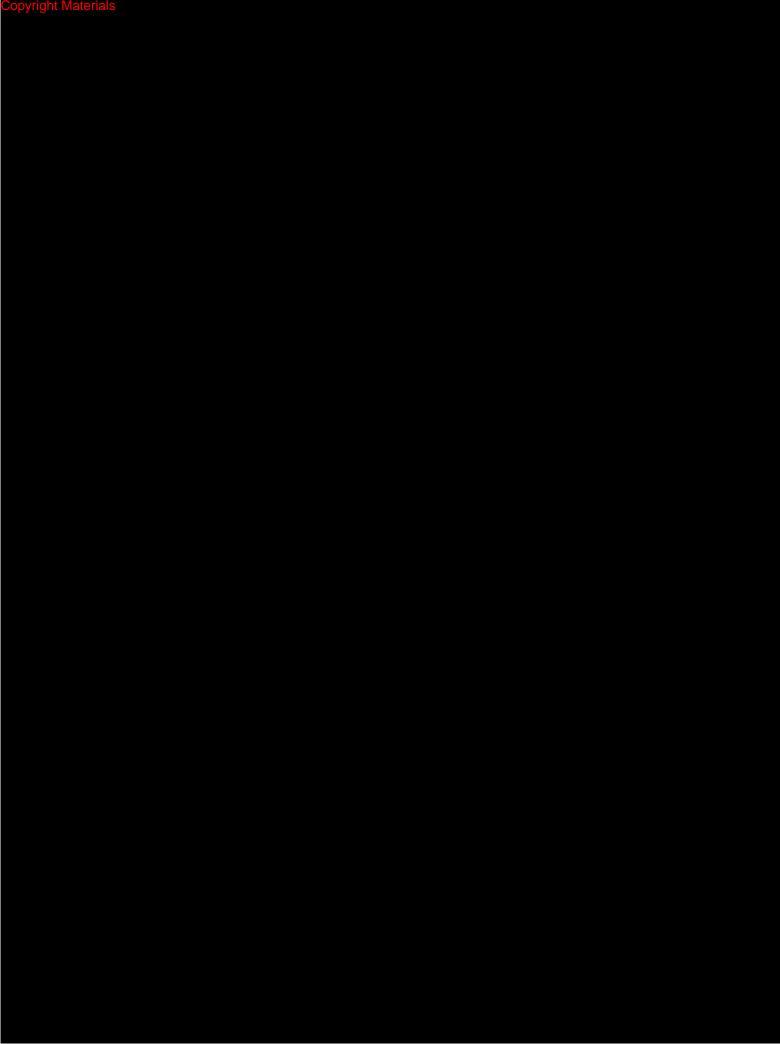


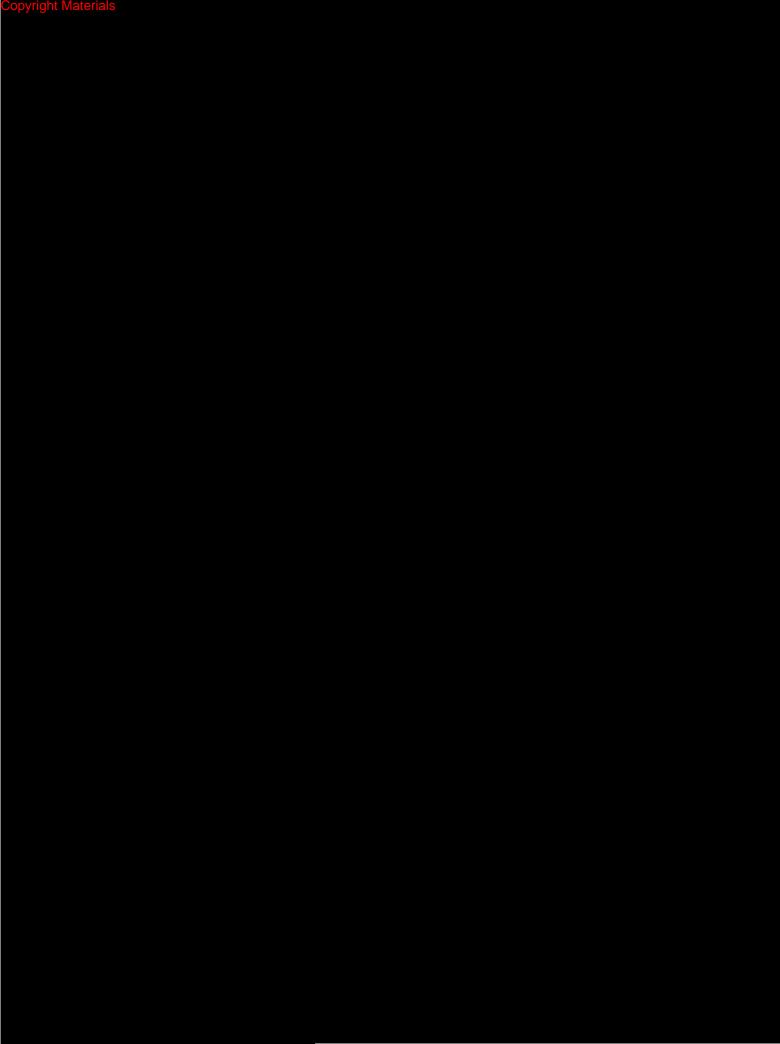


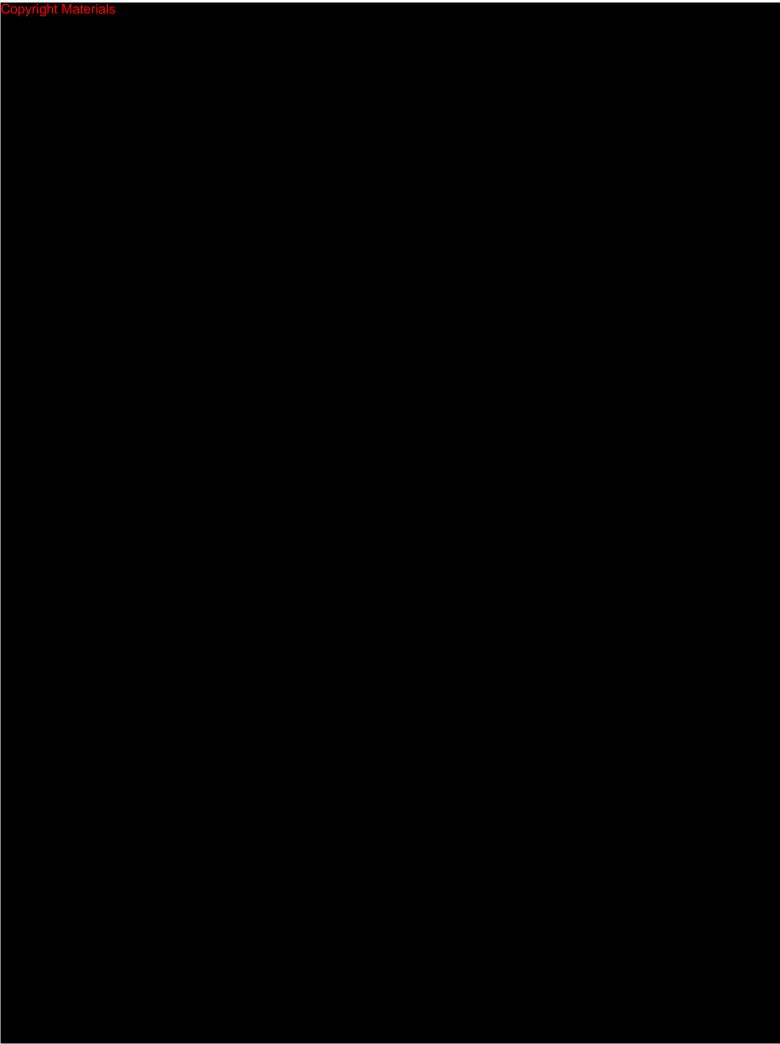


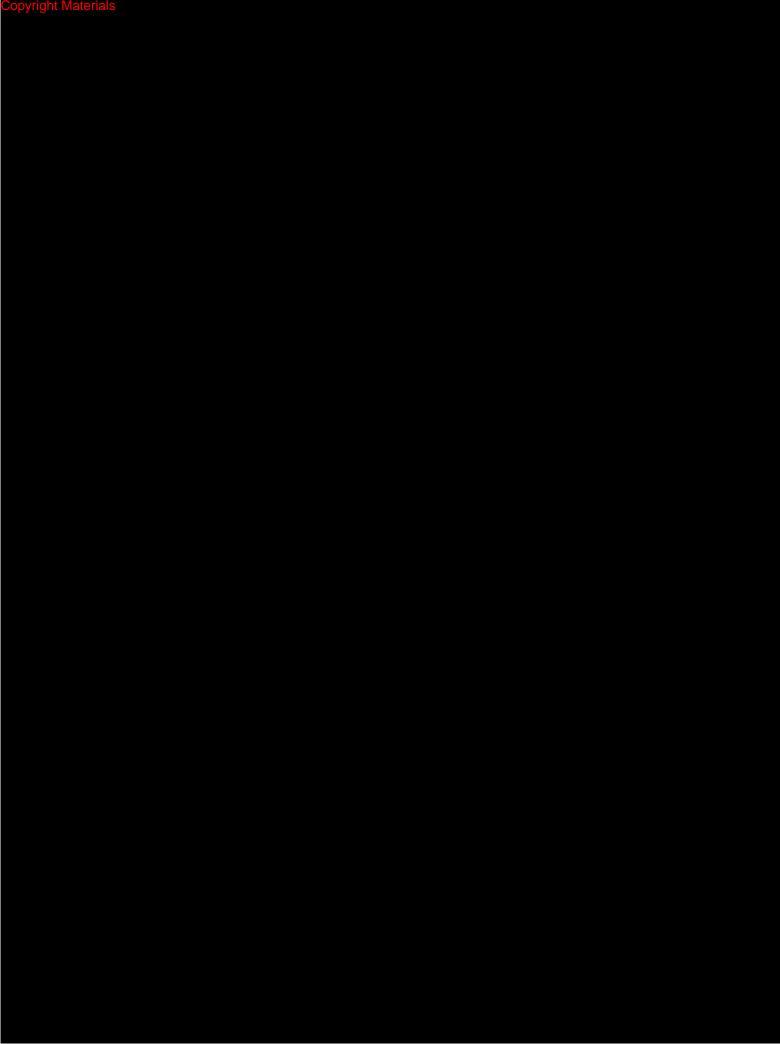


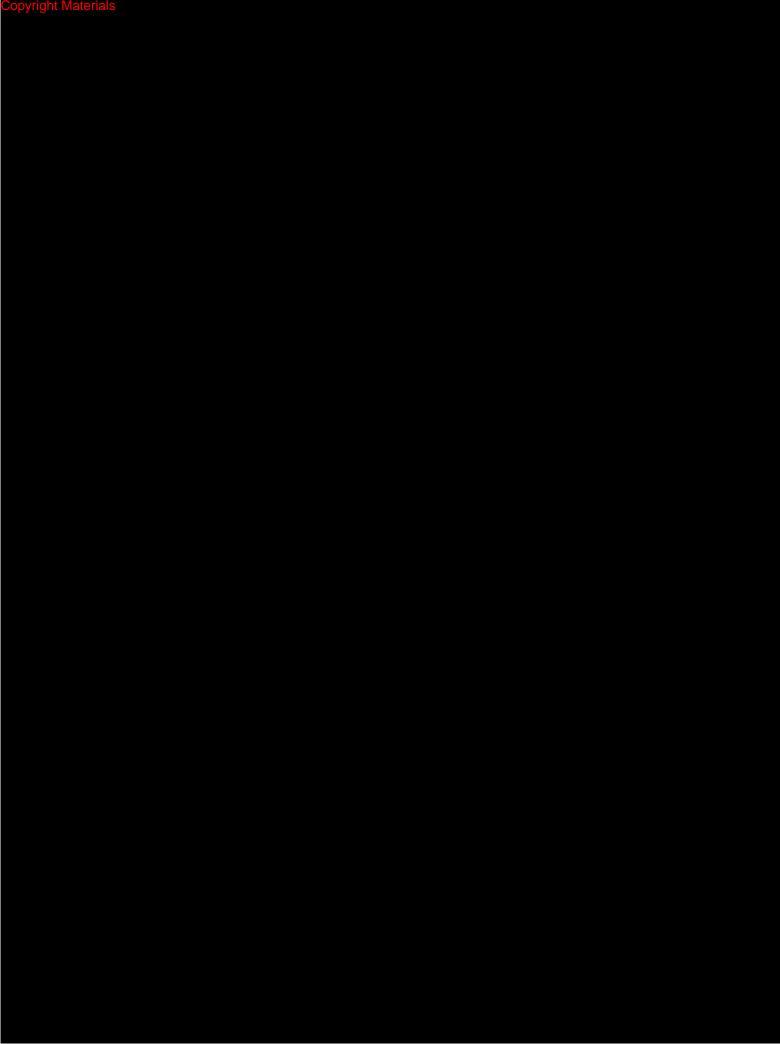


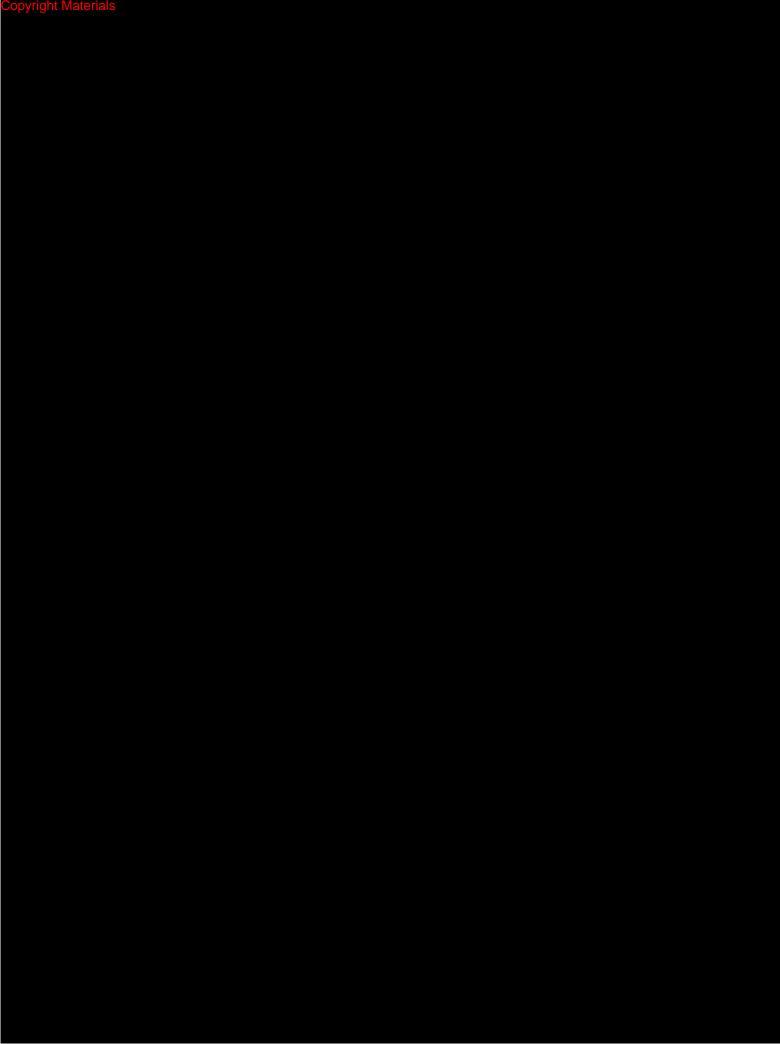


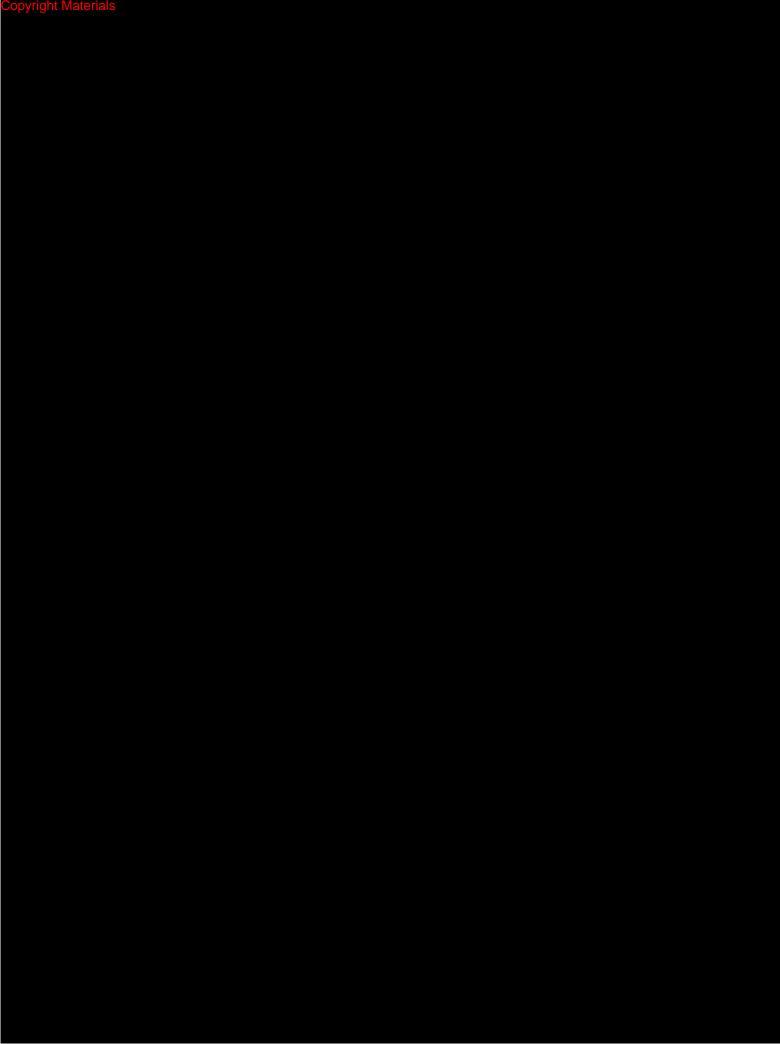


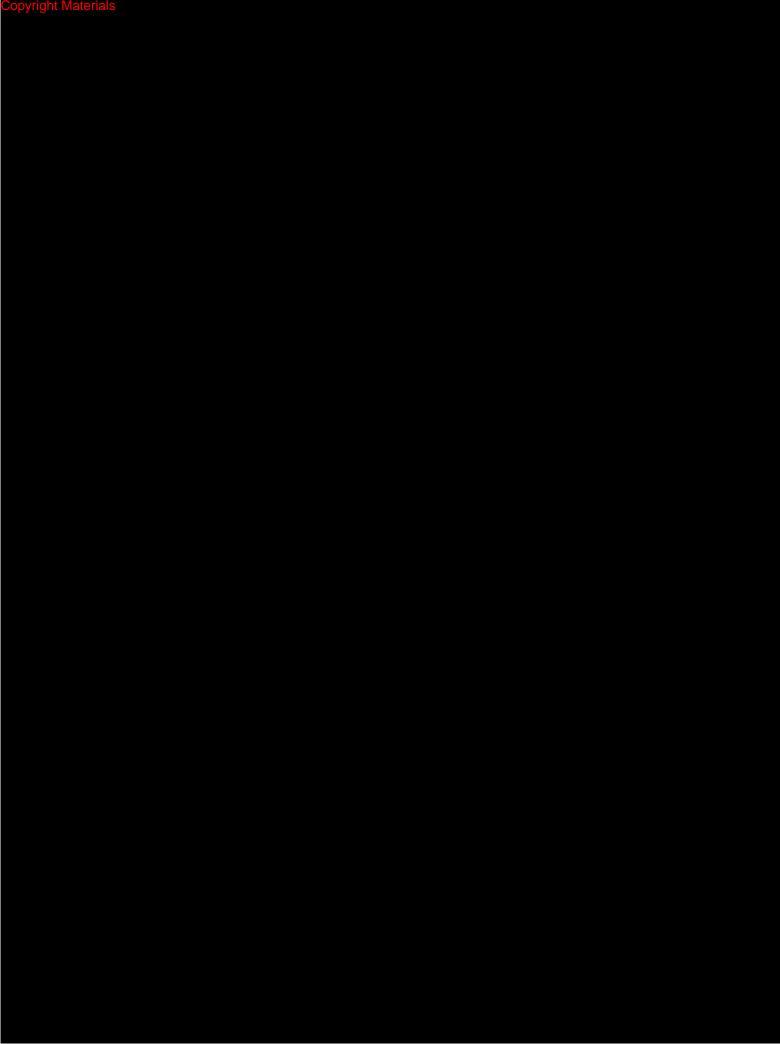


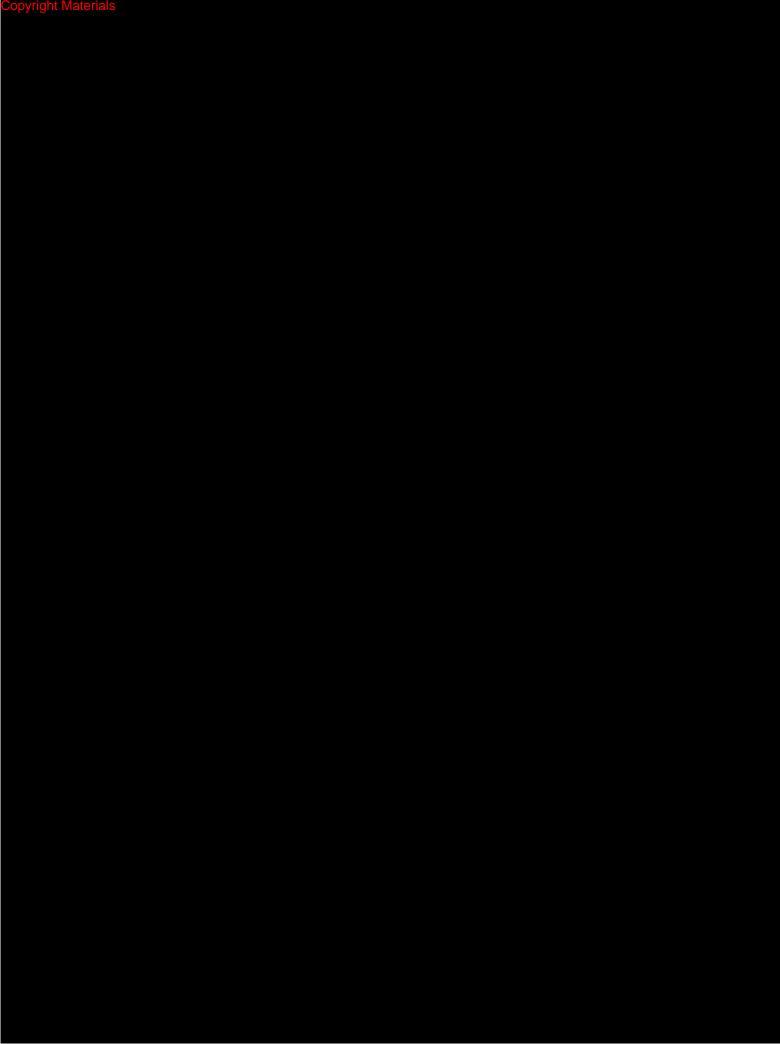


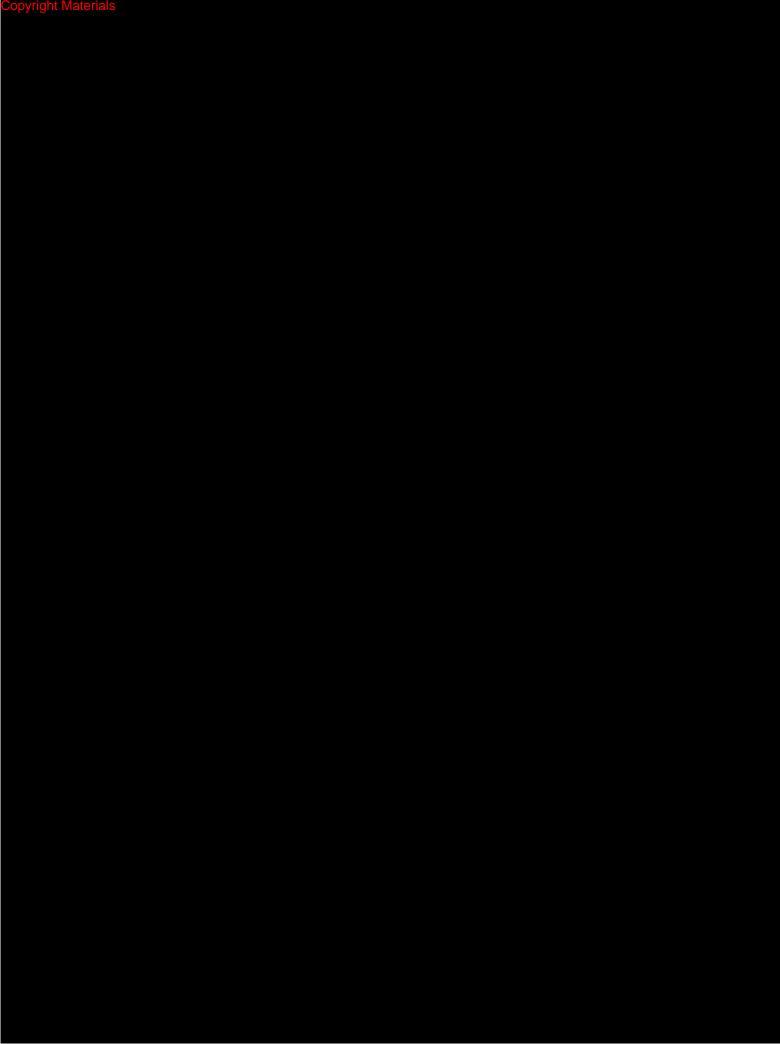


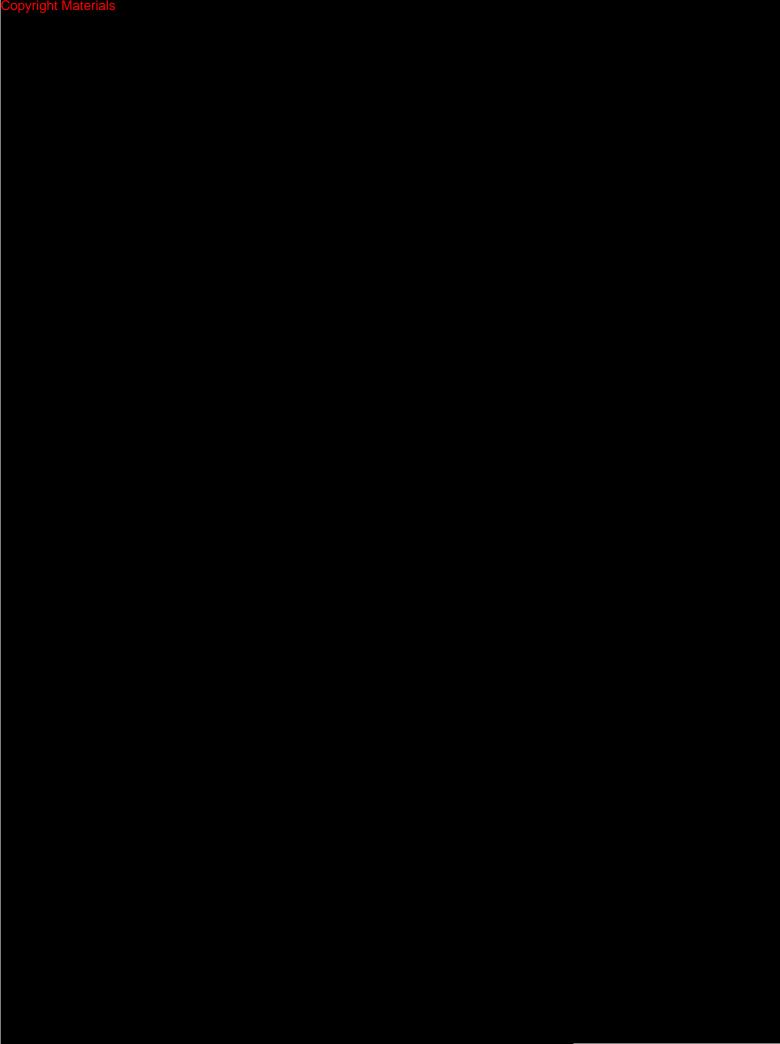


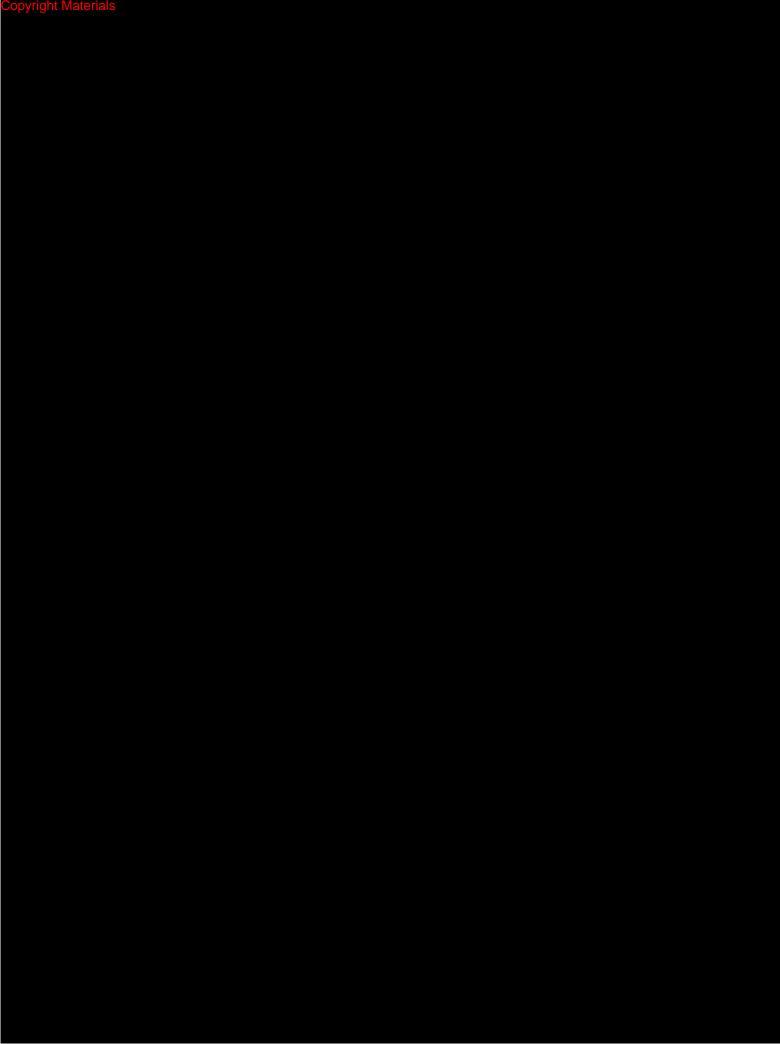


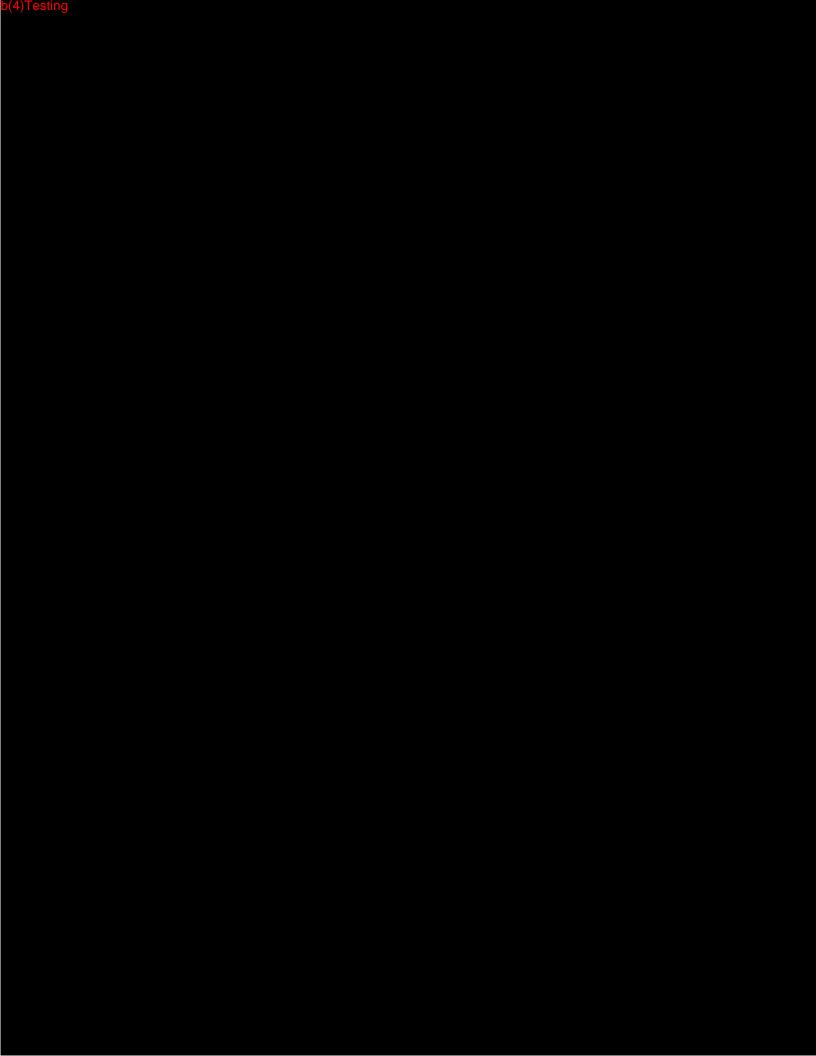


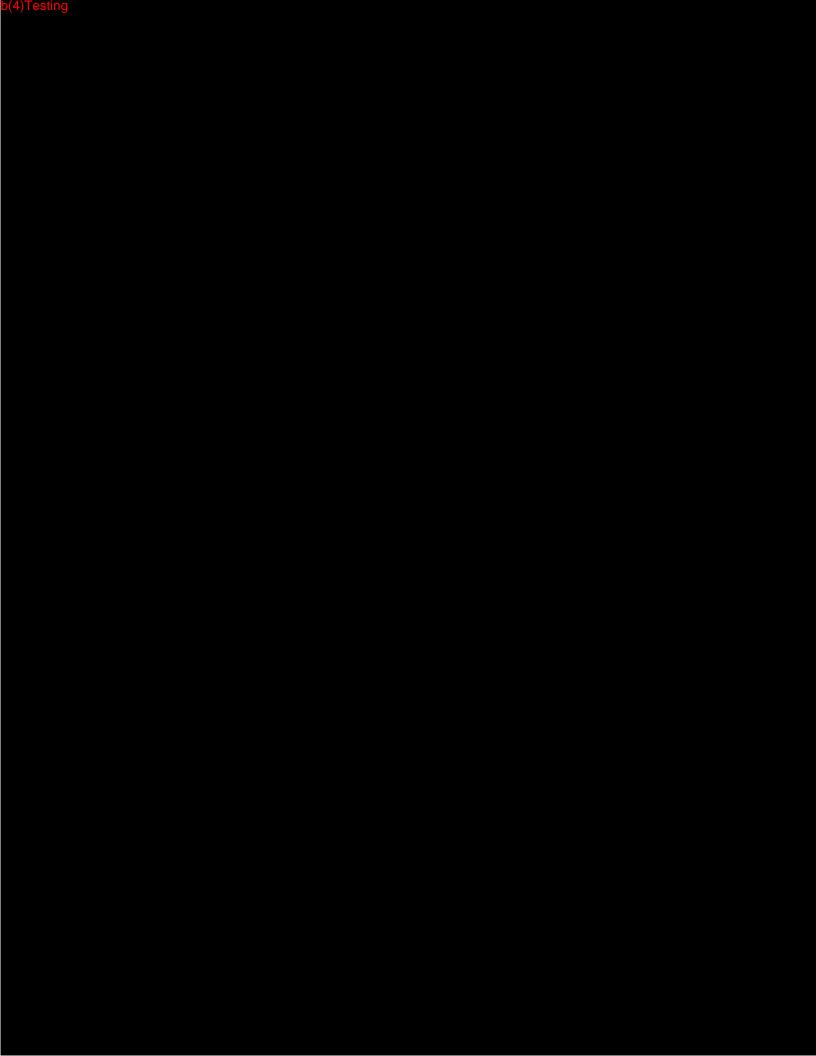


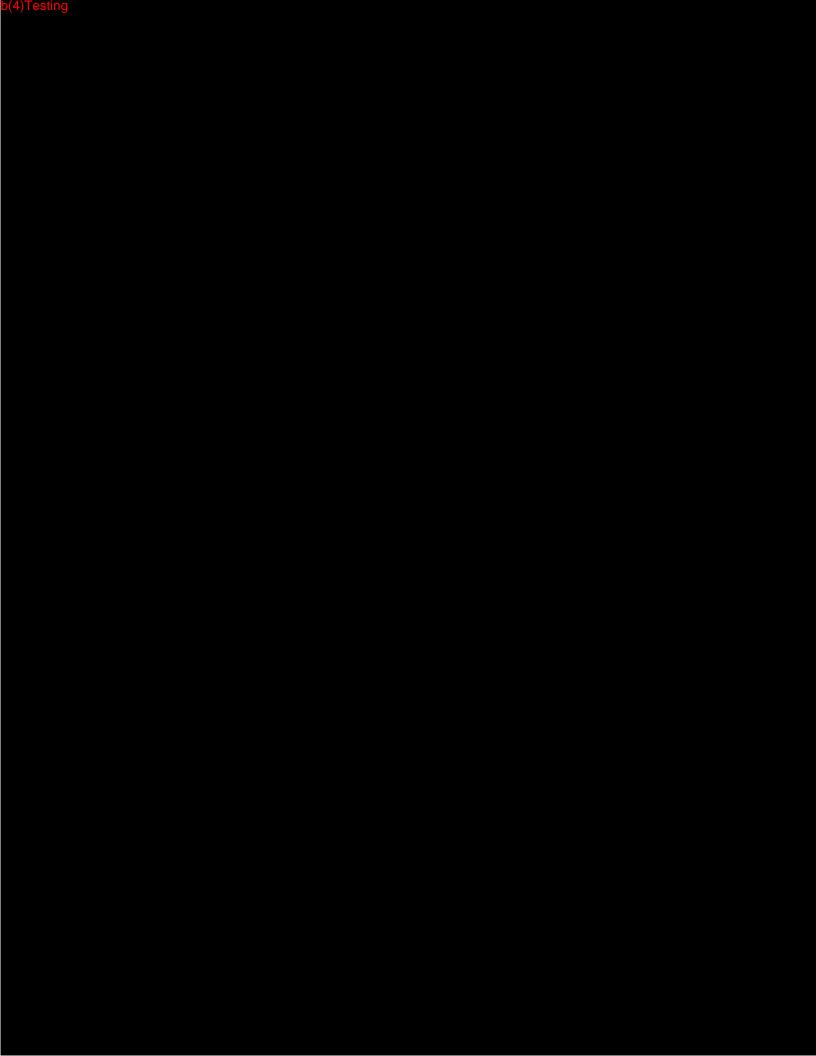


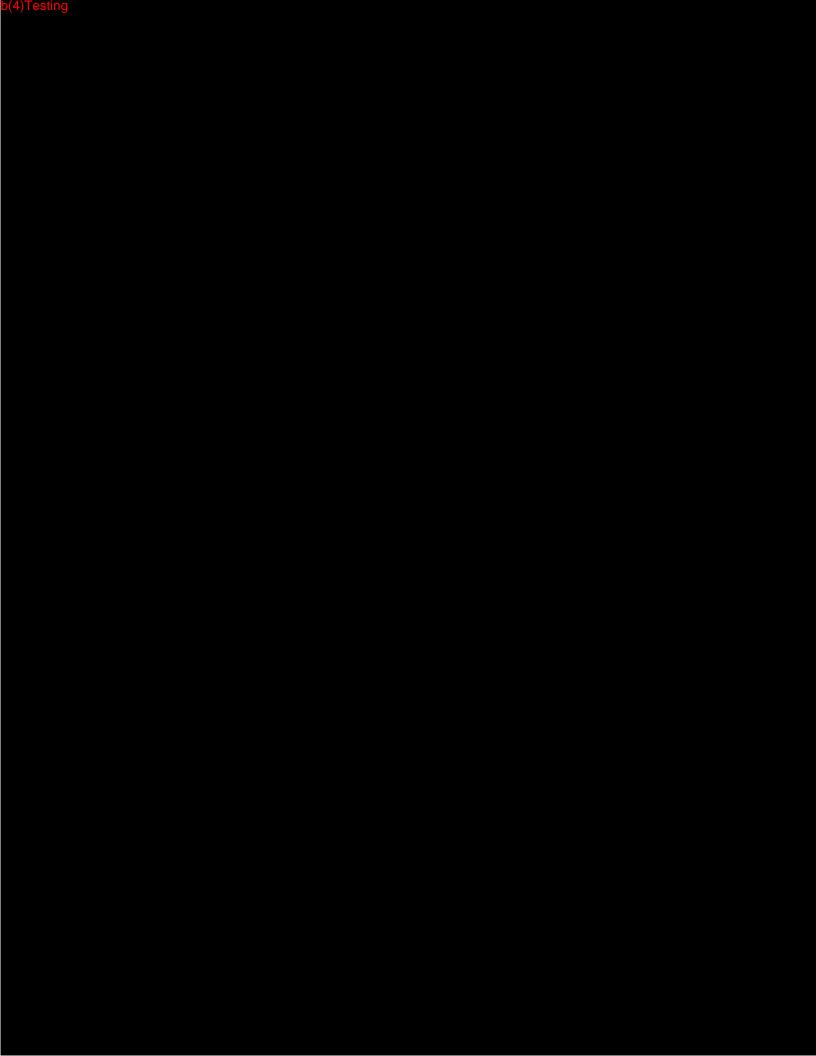


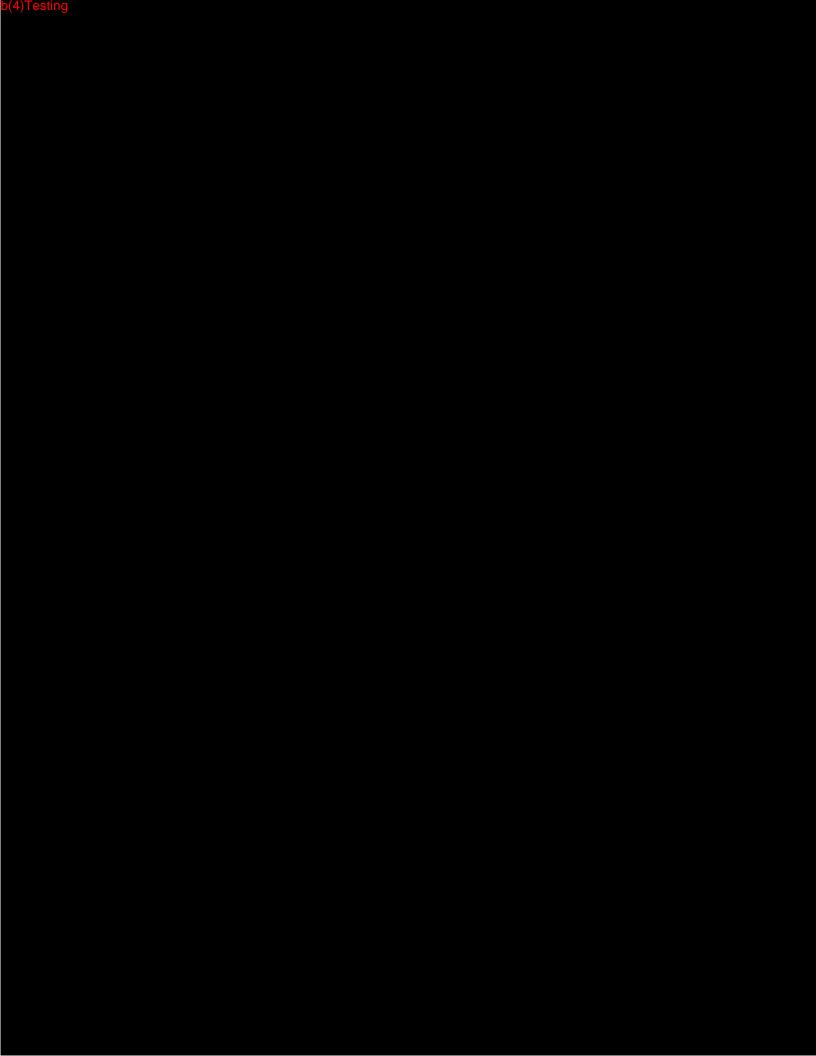


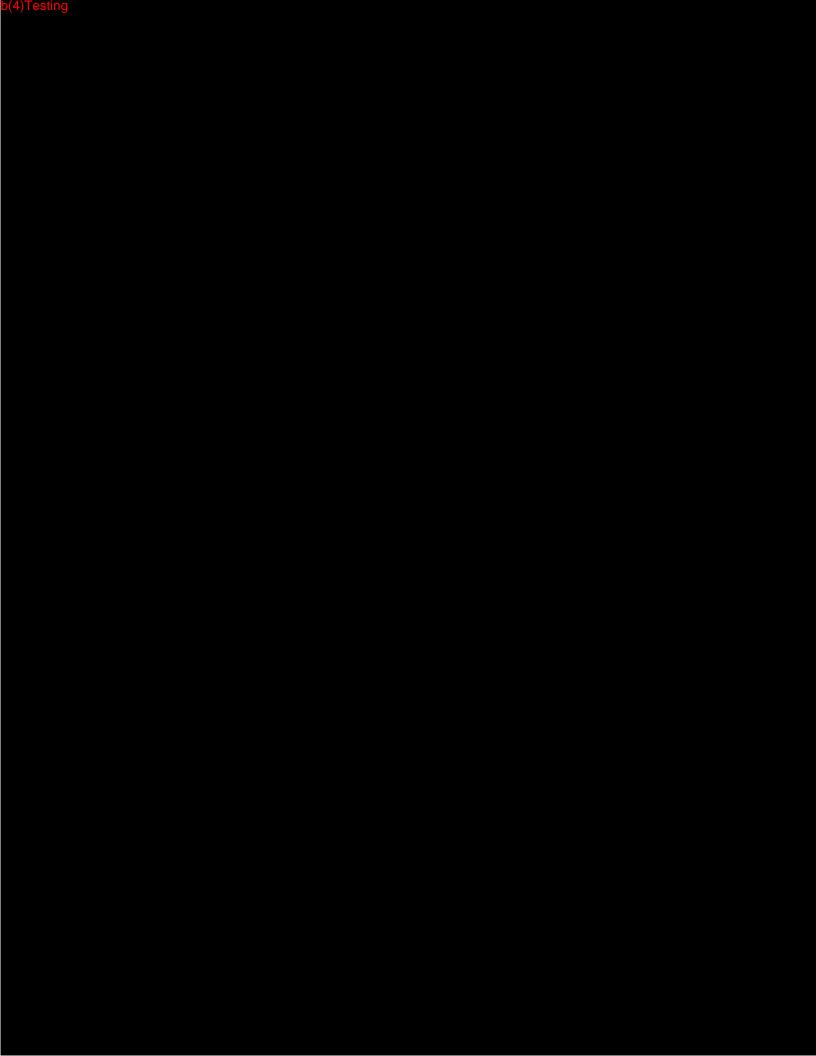


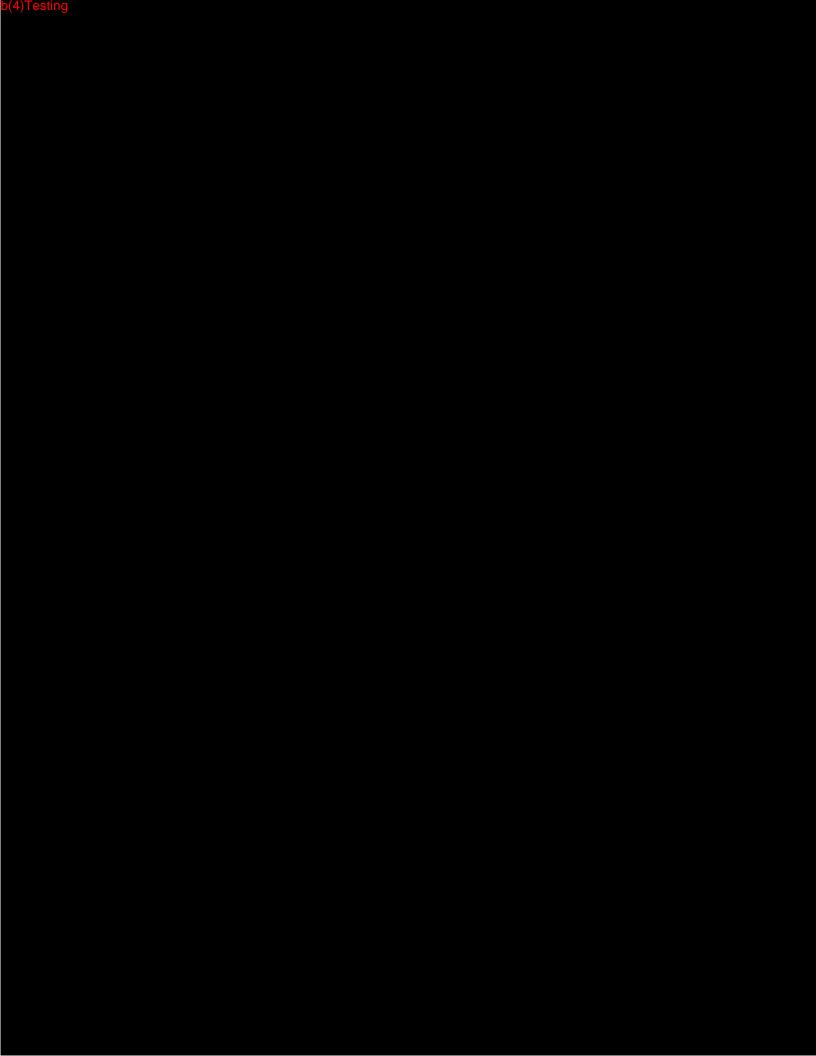


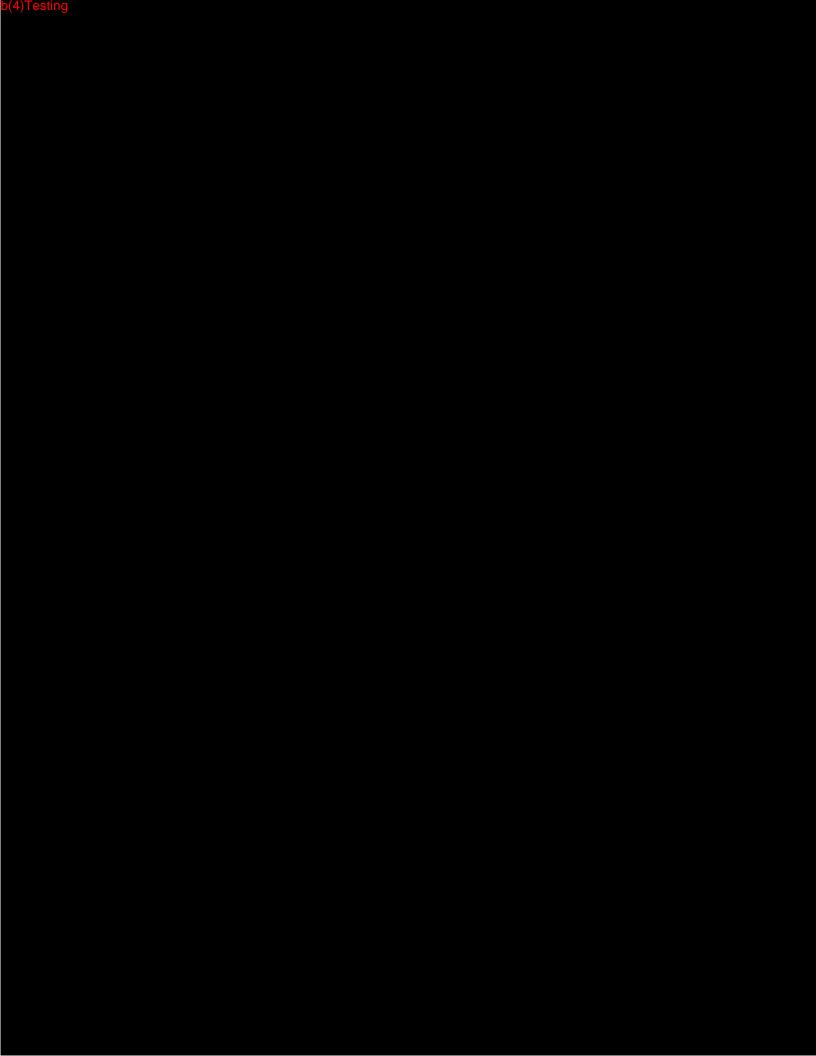


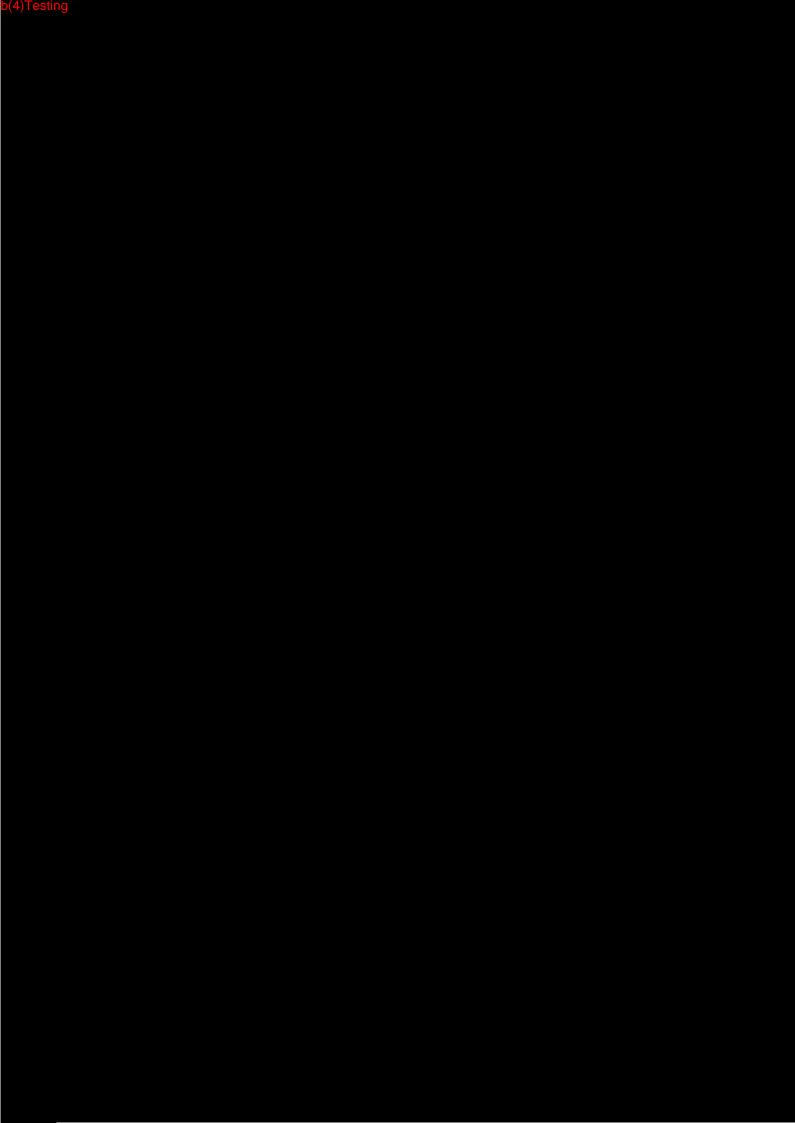


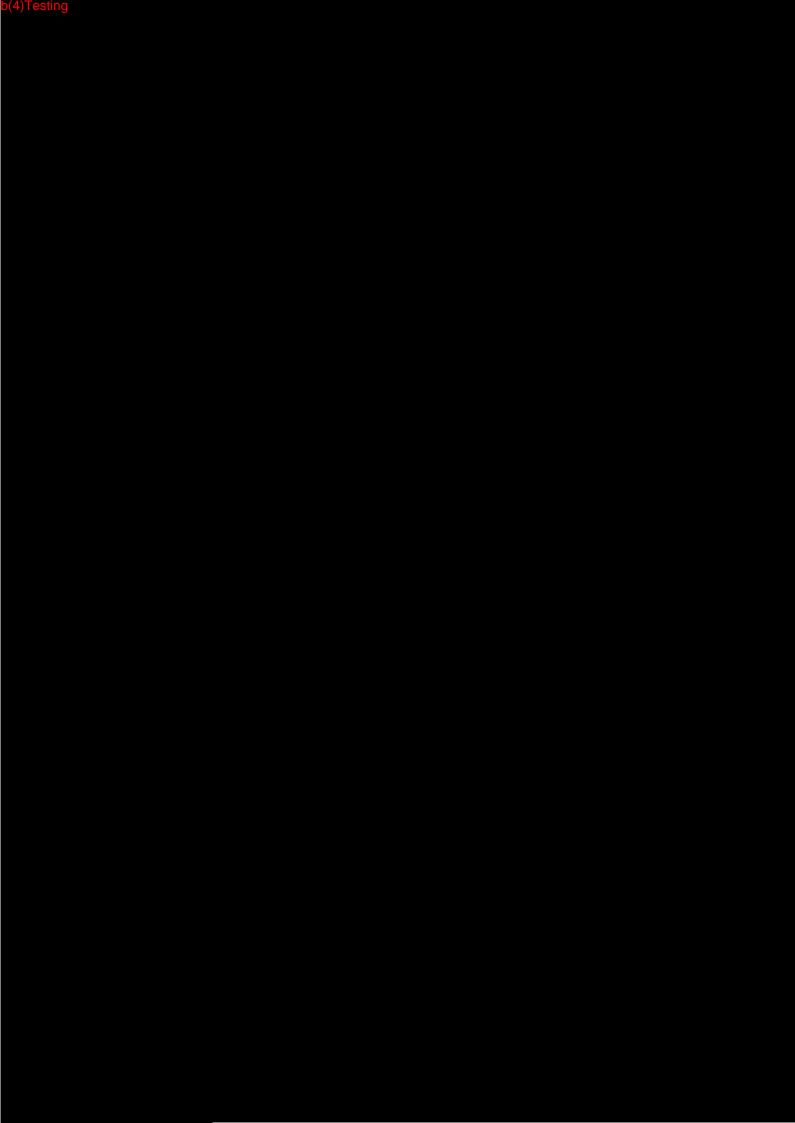


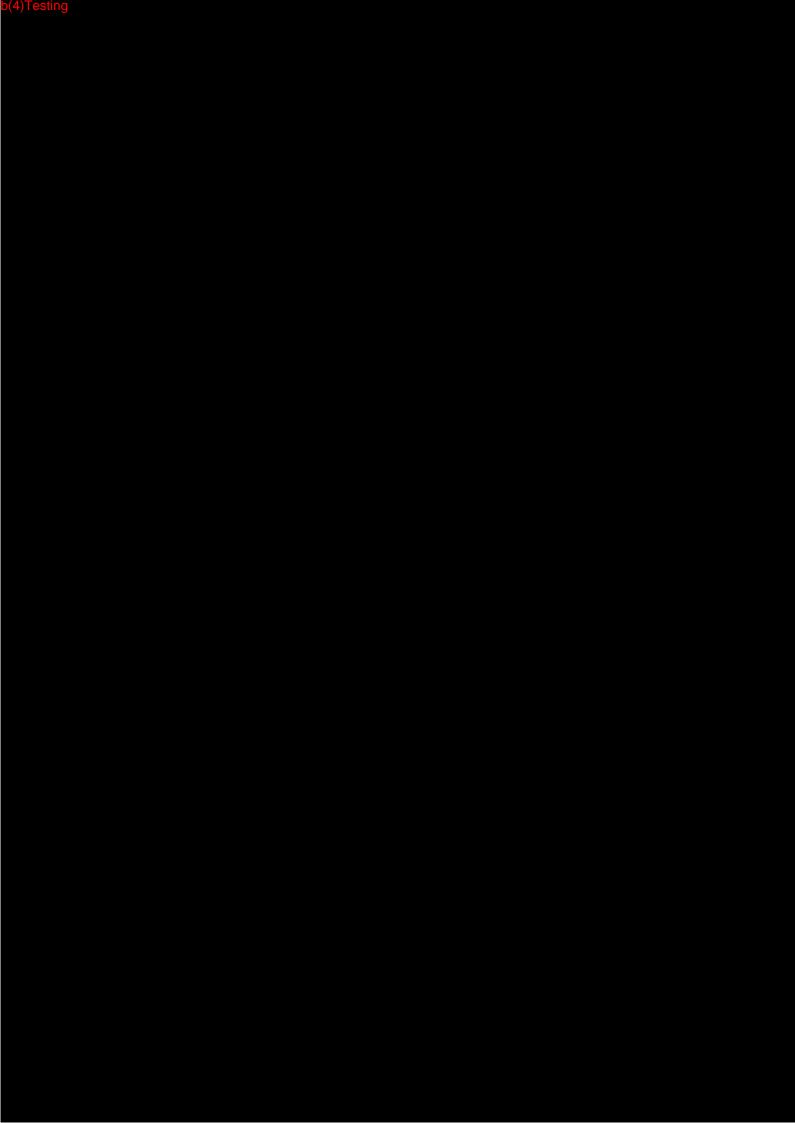


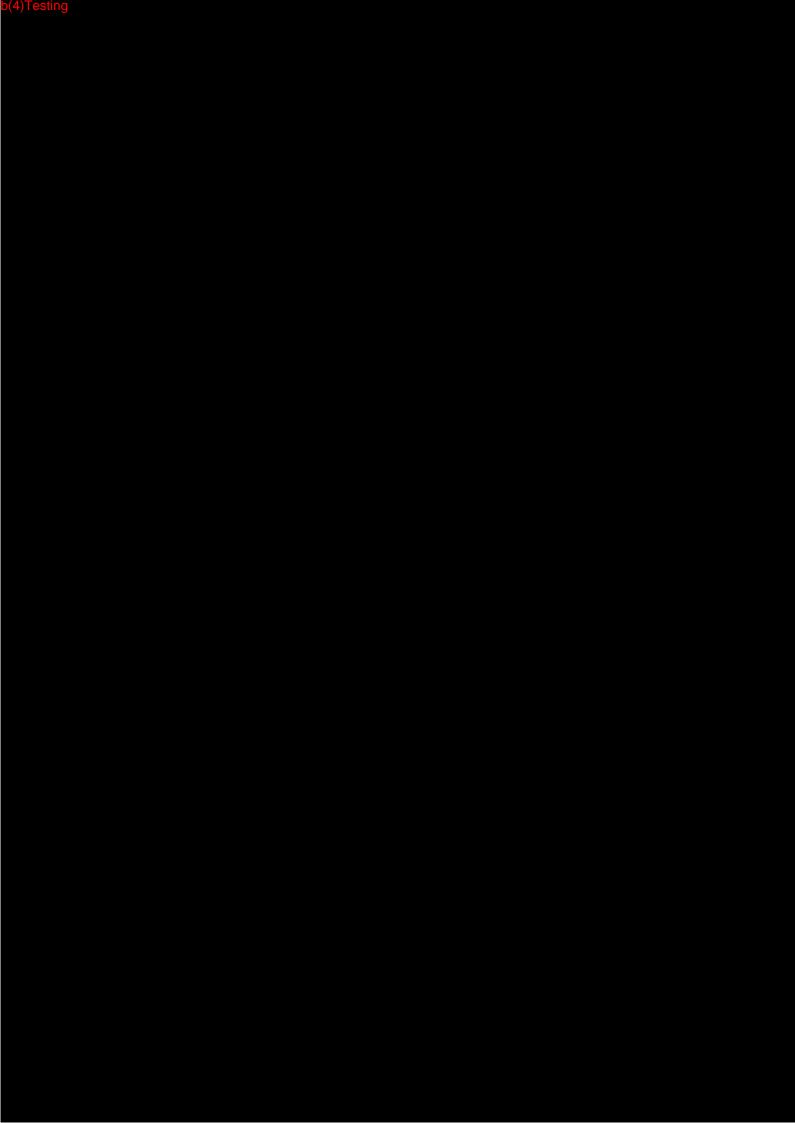


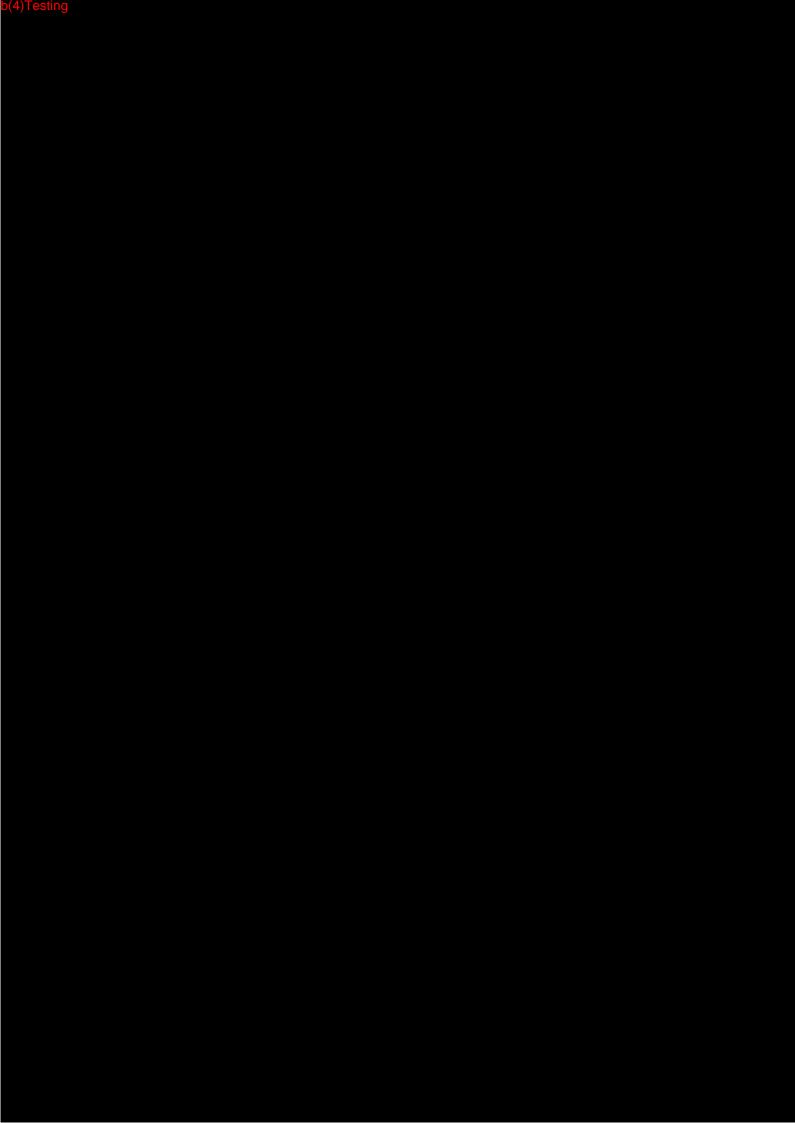


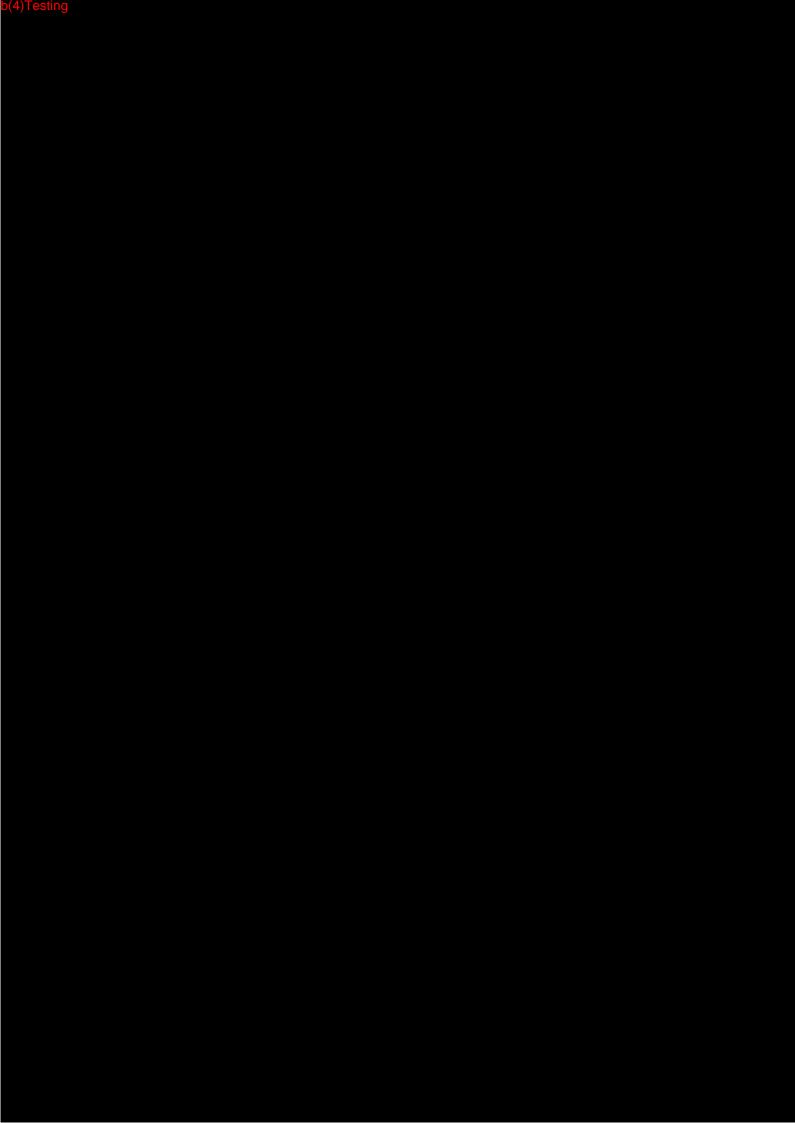


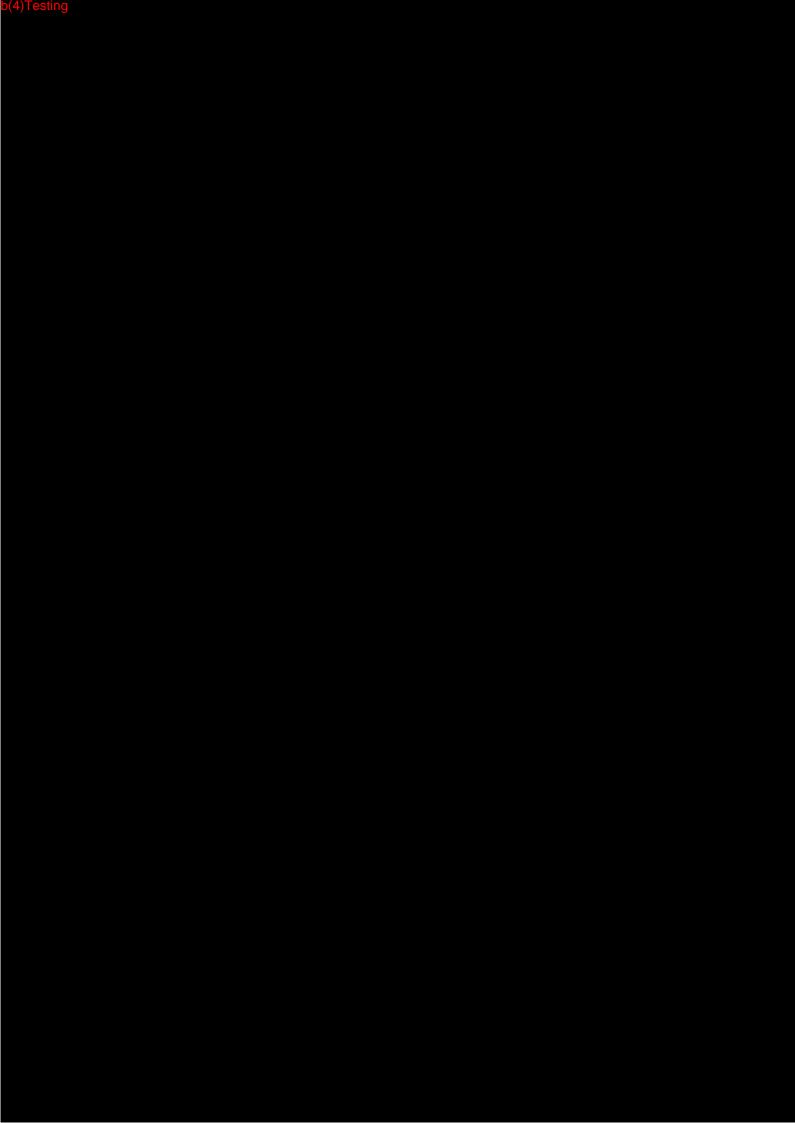


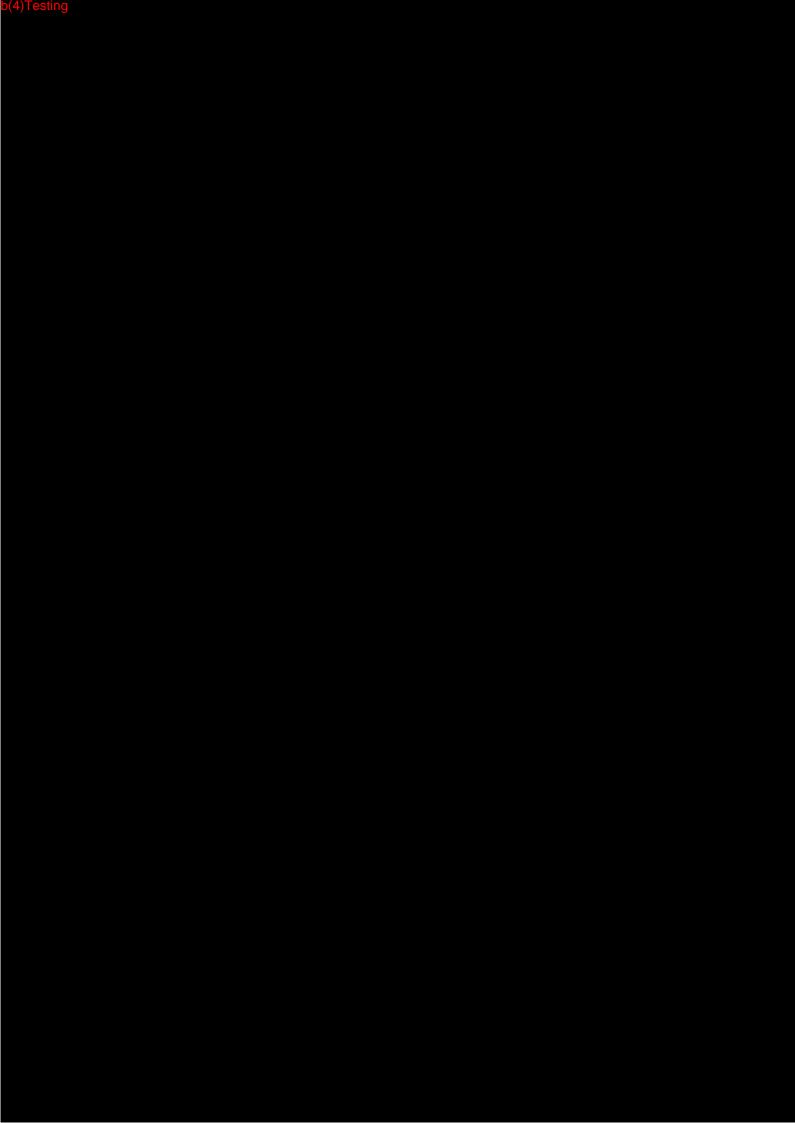


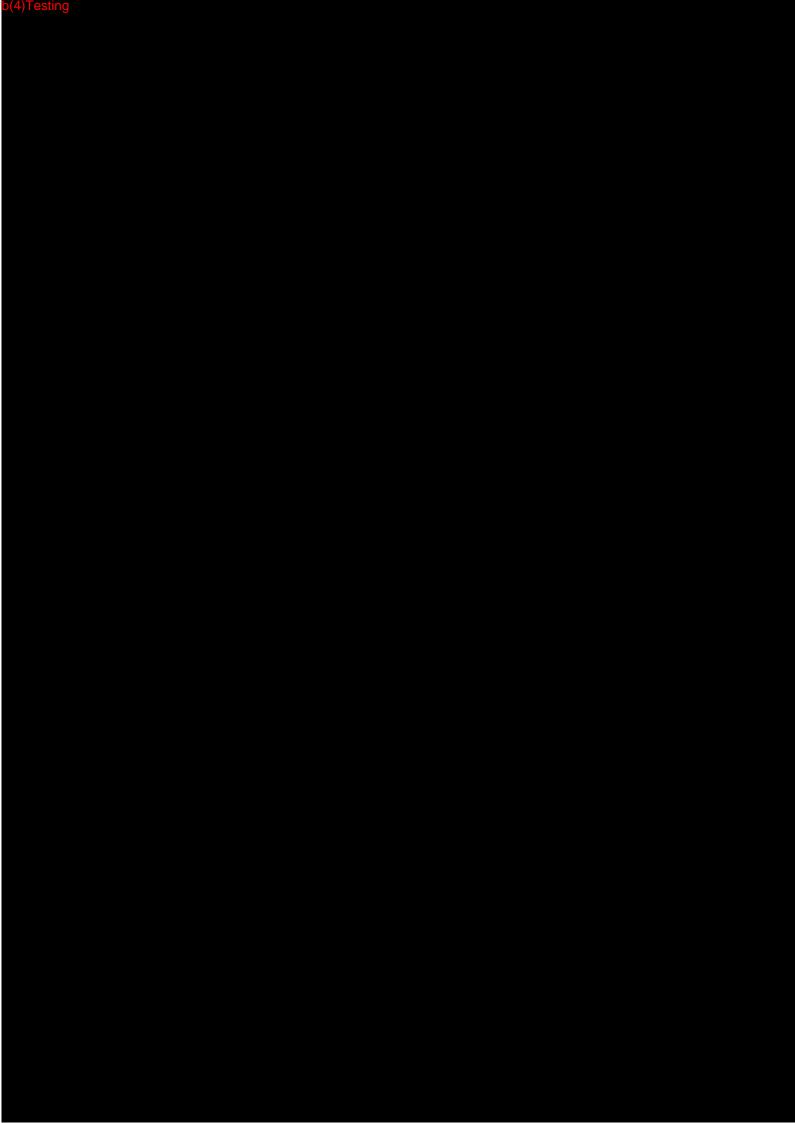


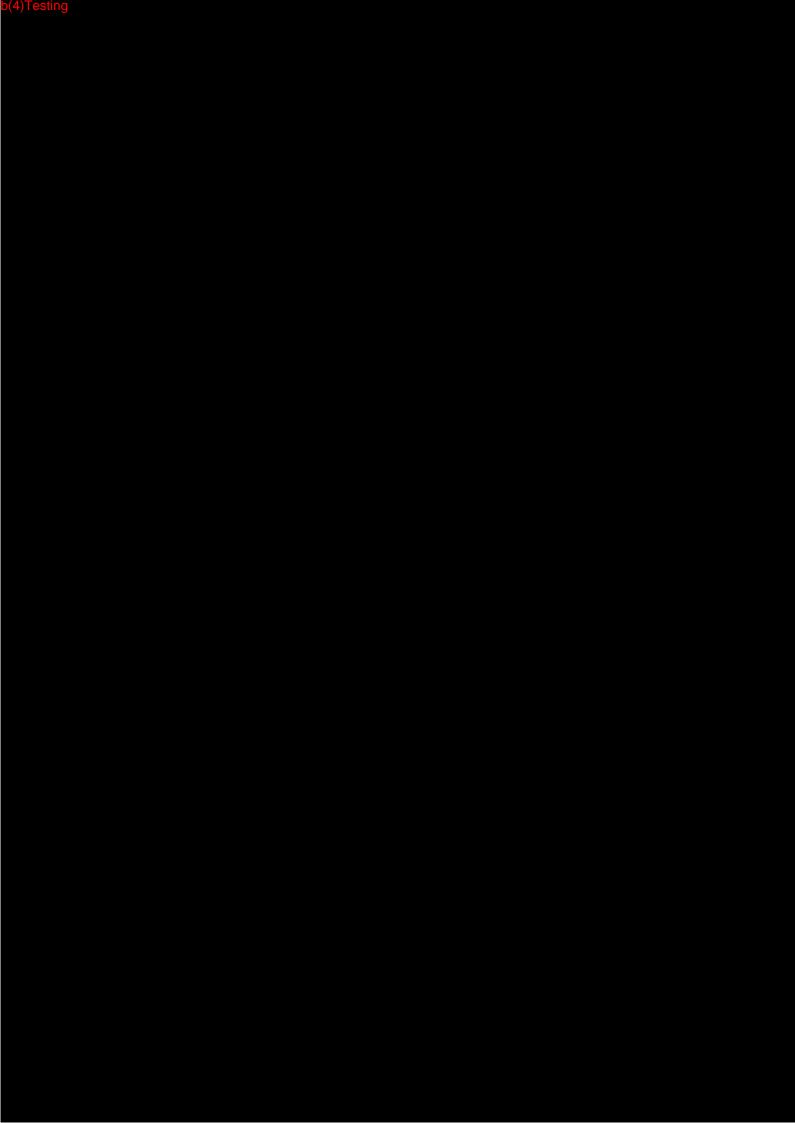


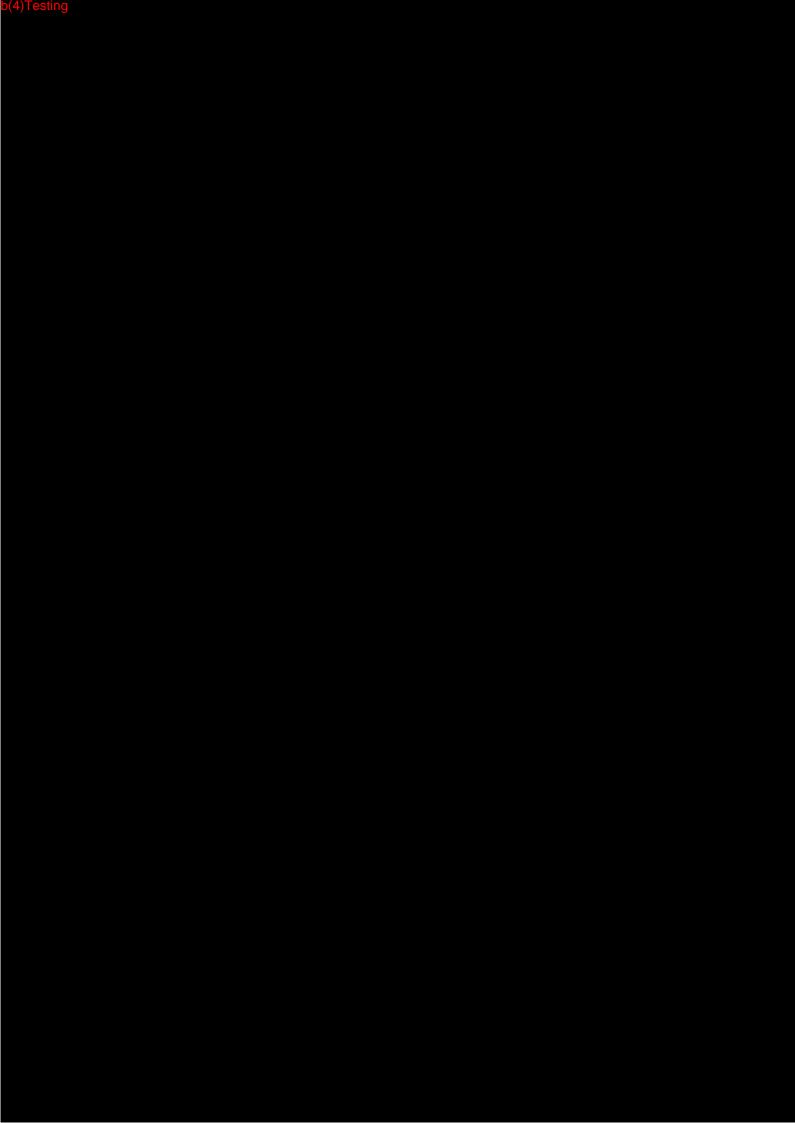














## **Declaration Letter**

To whom it may concern,

CoreLeader Biotech Co., Ltd will not make any claims of antimicrobial indication on future product labeling of HEMO-Bandage.

Ya-Wer Kno

Ya-Wen Kuo Director, Regulatory and R&D

July 14, 2015